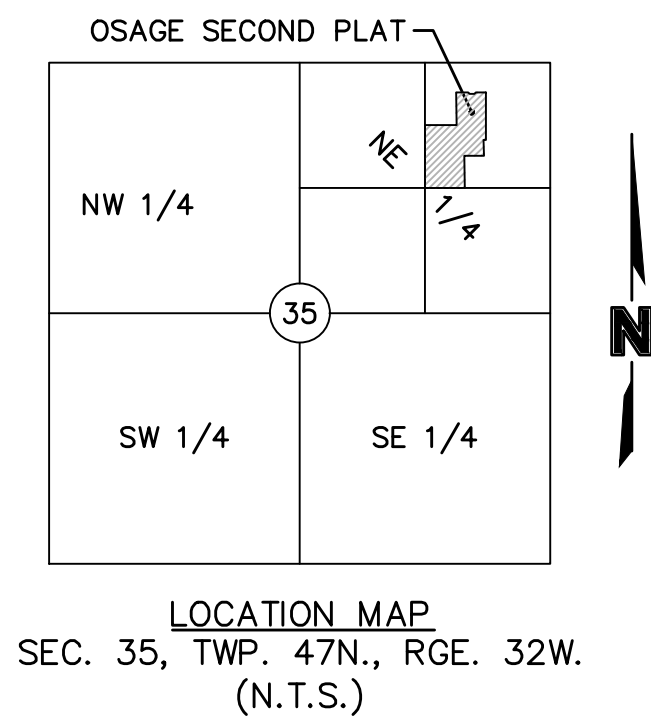
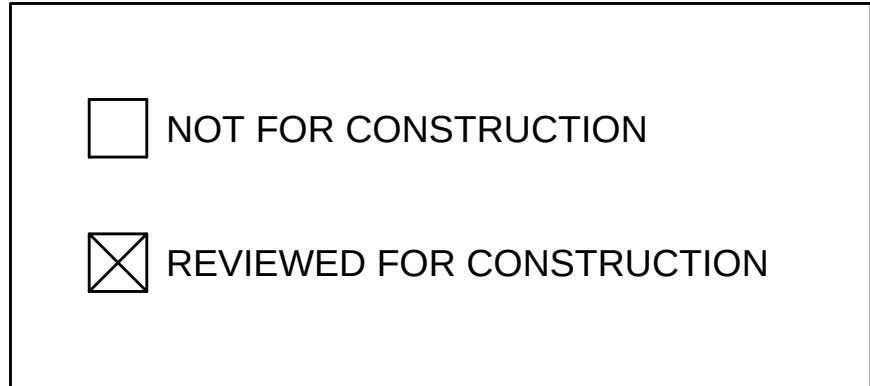


NE 1/4 SECTION 35, TOWNSHIP 47 N, RANGE 32 W.
IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



PROJECT TEAM & UTILITY CONTACT LIST	
<u>OWNER / DEVELOPER</u> CLAYTON PROPERTIES GROUP, INC. D.B.A. SUMMIT HOMES 120 SE 30TH STREET CONTACT: VINCENT WALKER LEE'S SUMMIT, MO 64082 PHONE: 816.246.6707 EMAIL: VINCENT@SUMMITHOMESKC.COM	<u>UTILITY SERVICE NUMBERS</u> NAME: LEE'S SUMMIT PUBLIC WORKS PHONE: 816-969-1800 NAME: LEE'S SUMMIT WATER & SERVICES DEPARTMENT PHONE: 816-969-1940
<u>ENGINEER</u> OLSSON 1301 BURLINGTON ST. SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JULIE SELLERS, PE PHONE: 816.361.1177 EMAIL: JSSELLERS@OLSSON.COM	NAME: SPIRE (MGE) PHONE: 314-342-0500 NAME: AT&T PHONE: 800-286-8313 NAME: EVERGY PHONE: 816-471-5275
<u>SURVEYOR</u> OLSSON 1301 BURLINGTON ST. SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH PHONE: 816.361.1177 EMAIL: JROUDEBUSH@OLSSON.COM	NAME: SPECTRUM (TWC) PHONE: 877-772-2253 NAME: GOOGLE FIBER PHONE: 877-454-6959



PROPERTY DESCRIPTION:

A tract of land in the Northeast Quarter of the Northeast Quarter of Section 35, Township 47 North, Range 32 West of the 5th Principal Meridian in Lee's Summit, Jackson County, Missouri being bounded and described by or under the direct supervision of Jeffrey P. Means P.L.S., 2004047866 as follows: Beginning at the Northwest corner of said Northeast Quarter; thence leaving said Northwest corner, South 02°00'00" East, on said West line of said Northeast Quarter of said Northeast Quarter, 659.27 feet to the Southwest corner of the North Half of said Northeast Quarter of said Northeast Quarter, also being the Point of Beginning of the tract of land to be herein described, thence South 88°08'29" East, on South line of said North Half of said Northeast Quarter of said Northeast Quarter, 127.65 feet to the North 1/2 of the North 1/2 of the North 1/2 of the North 1/2 of the North 1/2 of said Northeast Quarter; thence North 02°09'46" East, on the West line of said East Half of said Northeast Quarter of said Northeast Quarter of said Northeast Quarter, 346.14 feet to a point on the proposed Westery line of OSAGE RIVER PLAT (LOTS 1 THRU 41, INCLUSIVE AND TRACTS A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ, to the Northwest corner of said Northeast Quarter of said Northeast Quarter, containing 453.77 square feet or 10.42 acres, more or less.

BENCHMARK

BENCHMARK NO. 1
CHISELED PLUS ON THE EAST FLANGED BOLT OF THE FIRE HYDRANT ON THE WEST SIDE OF SW PRYOR ROAD ON ADJOINING PROPERTY SOUTH OF THE
SOUTHWEST CORNER OF SUBJECT PROPERTY.
ELEVATION = 1014.830

BENCHMARK NO. 2
RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE LOCATED ON THE SOUTH SIDE MISSOURI STATE HIGHWAY 150 AT THE WEST SIDE OF THE DRIVEWAY TO
2025 MISSOURI STATE HIGHWAY 150, LEE'S SUMMIT, MO.
ELEVATION = 1031.313

Sheet Number	Sheet Title
C101	TITLE SHEET
C102	GENERAL NOTES
C103	GENERAL LAYOUT
C104	TYPICAL SECTIONS
C105	GRADING PLAN (FOR REFERENCE ONLY)
C106	SWALE 1 PLAN & PROFILE
C107	SWALE 1 PLAN & PROFILE (CONT'D)
C108	SWALE 2 PLAN & PROFILE
C109	SWALE 3 PLAN & PROFILE
C110	ROADWAY PLAN & PROFILE (SW CLAYTON PLACE)
C111	ROADWAY PLAN & PROFILE (SW OSAGE DRIVE)
C112	ROADWAY PLAN & PROFILE (SW OSAGE DRIVE CONT'D)
C113	ROADWAY PLAN & PROFILE (SW RIVENGATE PLACE)
C114	ROADWAY PLAN & PROFILE (SW RUTHERFORD DRIVE)
C115	SW OSAGE DRIVE AND SW CLAYTON PLACE INTERSECTION
C116	SW OSAGE DRIVE AND SW RIVENGATE PLACE INTERSECTION
C117	SW RIVENGATE PLACE AND SW RUTHERFORD DRIVE INTERSECTION
C118	STORM SEWER PLAN & PROFILE (LINE 1)
C119	STORM SEWER PLAN & PROFILE (LINE 2)
C120	STORM SEWER PLAN & PROFILE (LINE 3)
C121	STORM SEWER PLAN & PROFILE (LINES 4 & 5)
C122	STORM SEWER PLAN & PROFILE (LINE 6)
C123	STORM SEWER PLAN & PROFILE (LINE 6 CONT'D)
C124	STORM SEWER PLAN & PROFILE (LINE 7)
C125	STORM SEWER PLAN & PROFILE (LINES 8 & 9)
C126	MASTER DRAINAGE PLAN
C127	DRAINAGE PLAN
C128	DRAINAGE TABLES
C129	DETAILS
C130	DETAILS (CONT'D)
C131	DETAILS (CONT'D)

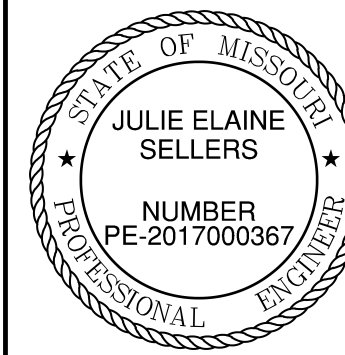
OLSSON HAS BEEN RETAINED TO PROVIDE AS-BUILT DRAWINGS FOR THIS PROJECT.


JULIE SELLERS, P.E.
CIVIL ENGINEER
MO#2017000367

5/26/2022
DATE

ASBUILT
02-03-2022

Olson

[illegible]

TITLE SHEET STREET & STORM SEWER PLANS	
OSAGE SECOND PLAT	
0000	0000

drawn by: _____ D.F. / M.O. / A.A.
checked by: _____ C.G.V.
designed by: _____ A.A.
QA/QC by: _____ J.E.S.
project no.: _____ C19-2333
drawing no.: _____
date: _____ 2022.05.2

SHEET
C101

DWG: F:\2019\2001-2500\019-2339-C\40-Design\AutoCAD\Final Plans - As-builts\Sheets\GNCV\STREET & STORM\C_TTL01_C192339.dwg
 XREFS: C_PBN DY_C192339 C_PBLK_A192339 C_PBLK_C192339
 DATE: May 26, 2022 7:32am
 USER: ssaylor

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
9. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

1. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY;
 - A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
 - B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
 - C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 - D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES.
 - E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI.
4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
3. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING

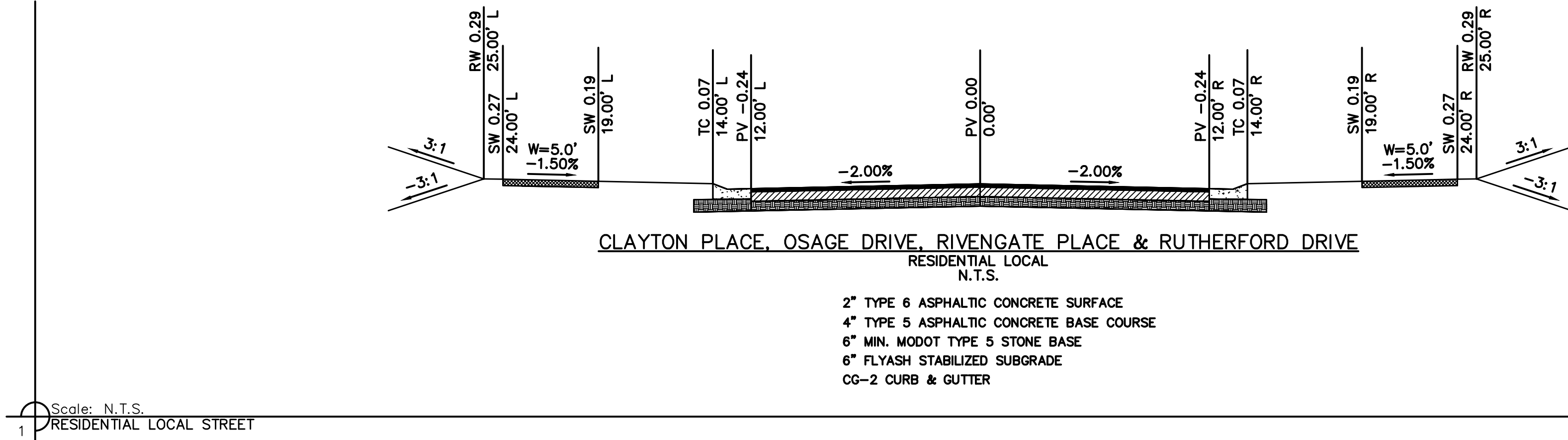
SHOP DRAWINGS

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:
 - A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;
 - B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;
 - C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
 - D. CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
 - E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.
2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - B. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN "APPROVED EQUAL" ALTERNATIVE.

1. STORM STRUCTURES SHALL BE PER CURRENT CITY DETAILS. IF CITY DOES NOT HAVE PUBLISHED DETAILS, STRUCTURES SHALL BE PER CURRENT APWA SPECIFICATIONS.
2. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LEE'S SUMMIT, MISSOURI.
3. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4. ALL STRUCTURE DIMENSIONS ARE TO INSIDE FACE OF STRUCTURE.
5. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE BOX DURING INSTALLATION.
6. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.
7. STORM SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
8. STRUCTURE INVERT CHANNELS SHALL BE SMOOTH, ROUNDED, AND CONFORMING TO 1/2 THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE STRUCTURE.
9. PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.
10. MAINTAIN MINIMUM DEPTH OF COVER PER APWA 5606.06

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
1	6" ASPHALT PAVEMENT	S.Y.	4764	
2	6" MODOT TYPE 5 ROCK SUBGRADE	S.Y.	4764	
3	SUBGRADE STABILIZATION (6" FLYASH TREATMENT)	S.Y.	5877	
4	CONCRETE CURB & GUTTER (CG-2)	L.F.	3334	
5	5' CONCRETE SIDEWALK	L.F.	58	
6	ADA RAMP	EA.	9	
7	STOP SIGNS	EA.	3	
8	STREET NAME SIGNS	EA.	6	
STORM				
9	STD. CURB INLET (5'x3' INSIDE)	EA.	—14—	14
10	STD. FIELD INLET (4'x4' INSIDE)	EA.	—6—	6
11	STD. MANHOLE (4' DIA. INSIDE)	EA.	—1—	1
12	15" HDPE	L.F.	—1996—	1994.19
13	18" HDPE	L.F.	—328—	328.15
14	24" HDPE	L.F.	—203—	202.20
15	CONNECTION TO EXISTING	EA.	—5—	5

CONTROL POINT TABLE				
POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
11	978424.224	2811650.442	1030.85	3" IB/CAP SET IN THE CENTER MEDIAN OF ROUTE 150. IT IS DUE NORTH OF THE CENTER LINE OF THE DRIVEWAY TO PROPERTY ADDRESS 2025 ROUTE 150. IT IS 12.15 FT WEST OF A LIGHT POLE, 8.5 FT SOUTH OF THE BACK OF CURB, AND 8.1 FT NORTH OF THE BACK OF CURB.
12	978340.573	2812332.280	1036.11	3" IB/CAP SET ON THE EAST SIDE OF SW PRYOR RD AT THE SOUTHEAST CORNER OF THE INTERSECTION OF ROUTE 150 AND SW PRYOR RD. IT IS 2.15 FT EAST OF THE BACK OF CURB, 19 FT WEST OF THE TRAFFIC SIGNAL POLE, AND 9.6 FT WEST OF A VAULT.
13	977064.448	2812265.992	1012.10	3" IB/CAP SET ON THE NORTHEAST CORNER OF THE INTERSECTION OF SW PRYOR RD AND SW NAPA VALLEY DR. IT IS 6 FT EAST OF THE BACK OF CURB, 10.2 FT NORTH OF THE CORNER OF THE SIDEWALK, AND 7.25 FT WEST OF ROCK LANDSCAPE BORDER.
14	977092.478	2810924.856	1040.93	3" IB/CAP SET IN THE NORTHWEST CORNER OF THE SOUTH ADJOINING PROPERTY. IT IS 7.5 FT EAST OF THE FENCE LINE, AND 45 FT SOUTH OF OF THE TREE LINE.
18	978446.811	2810956.695	1050.47	3" IB/CAP SET IN THE CENTER MEDIAN OF ROUTE 150. THE POINT IS DIRECTLY SOUTH OF A WHITE MAILBOX ON AN ORANGE POST FOR HOUSE ADDRESS 2144 ROUTE 150. IT IS 6.6 FT SOUTH OF THE BACK OF CURB, 5.8 FT NORTH OF THE BACK OF CURB, AND 31 FT EAST OF A LIGHT POLE.
BENCHMARK				
BMK1	977045.350	2812211.924	1014.83	CHISELED PLUS ON THE EAST FLANGED BOLT OF THE FIRE HYDRANT ON THE WEST SIDE OF SW PRYOR ROAD ON ADJOINING PROPERTY SOUTH OF THE SOUTHWEST CORNER OF SUBJECT PROPERTY.
BMK2	978357.416	2811627.737	1031.31	RAILROAD SPIKE IN THE NORTH FACE OF POWER POLE LOCATED ON THE SOUTH SIDE MISSOURI STATE HIGHWAY 150 AT THE WEST SIDE OF THE DRIVEWAY TO 2025 MISSOURI STATE HIGHWAY 150, LEE'S SUMMIT, MO.



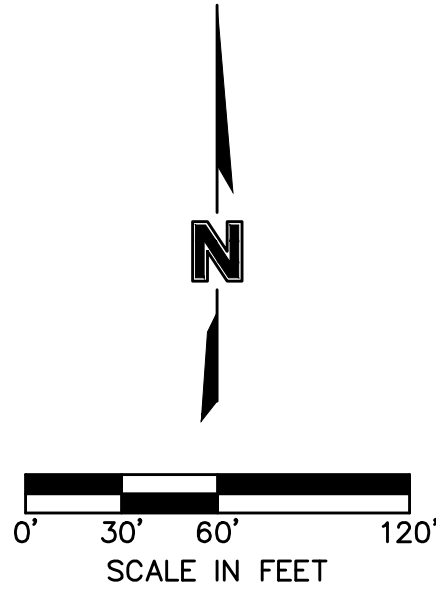
NOT AS-BUILT

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DATE: May 26, 2022 7:33am XREFS: C:\BASE_C192339 C:\PBDY_C192339 C:\PSTR_C192339 C:\PTBK_C192339

GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.
3. ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

NOT AS-BUILT

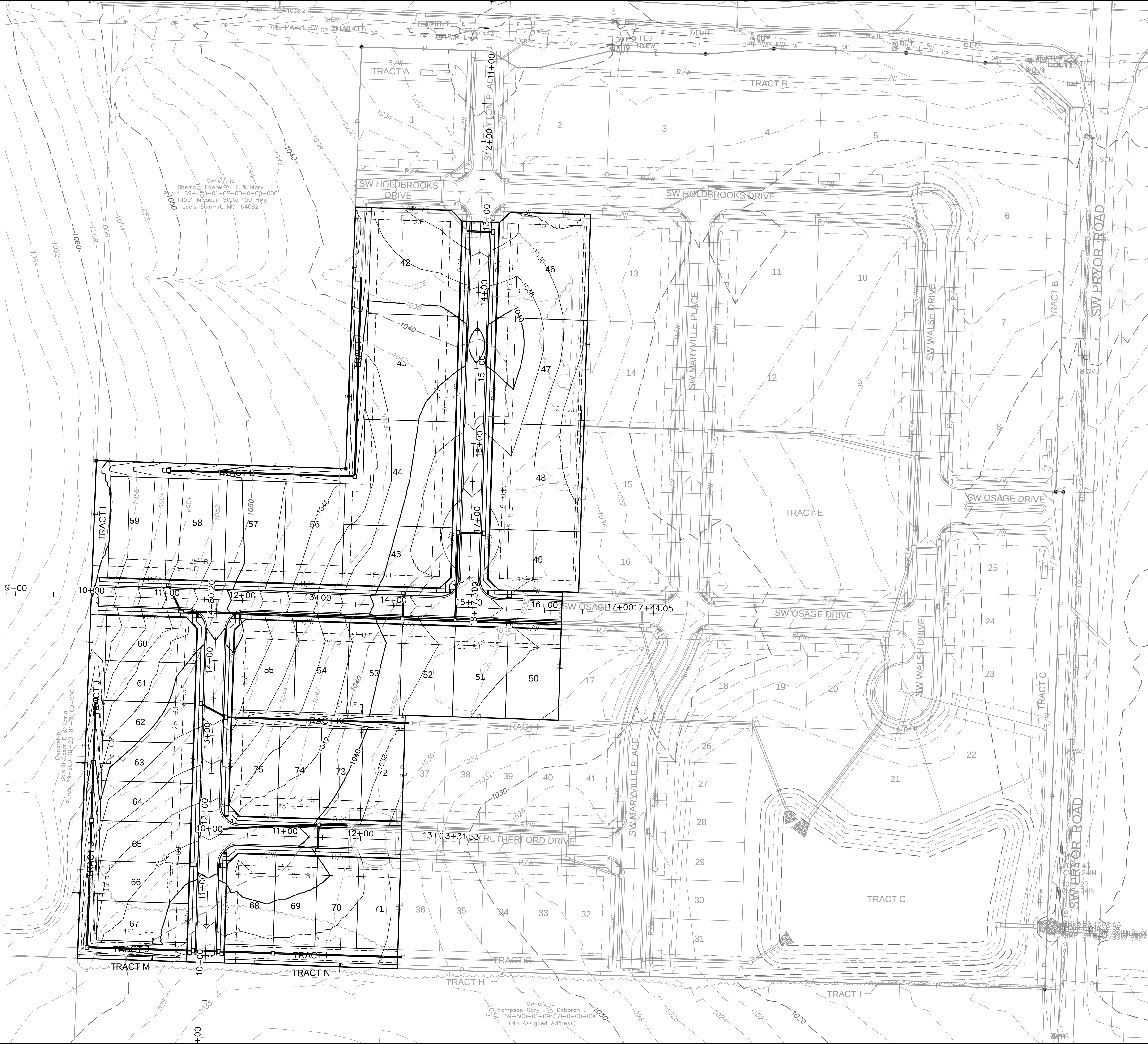


LEGEND	
-100-	EXISTING INDEX CONTOURS
-100	EXISTING INTERMEDIATE CONTOURS
-100	PROPOSED INDEX CONTOURS
-100	PROPOSED INTERMEDIATE CONTOURS

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	2,438	827
SITE	7,812	5,520
TOTAL	10,250	6,347

EARTHWORK QUANTITIES NOTES:

1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.



GRADING PLAN (FOR REFERENCE ONLY)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C105

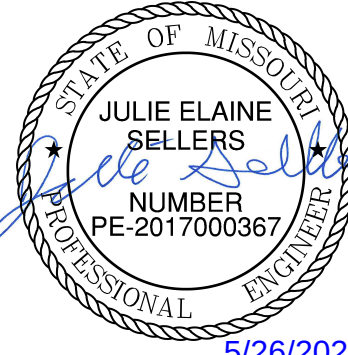
REVISIONS DESCRIPTION

DATE

REV. NO.

REVISIONS

2020

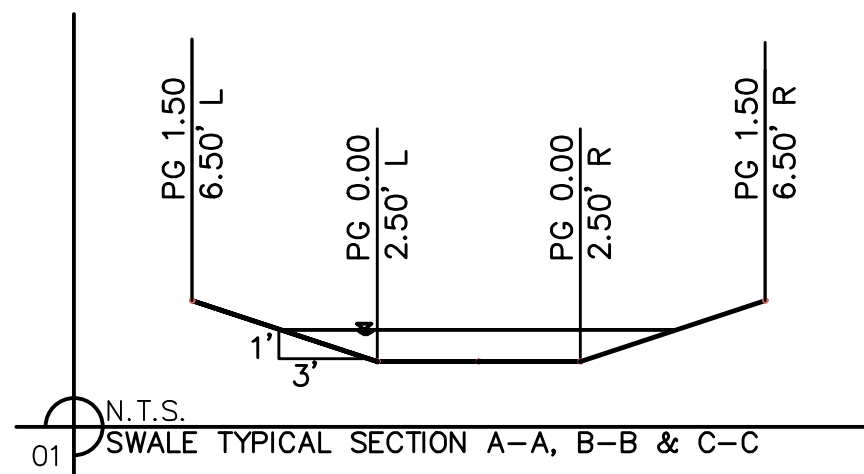


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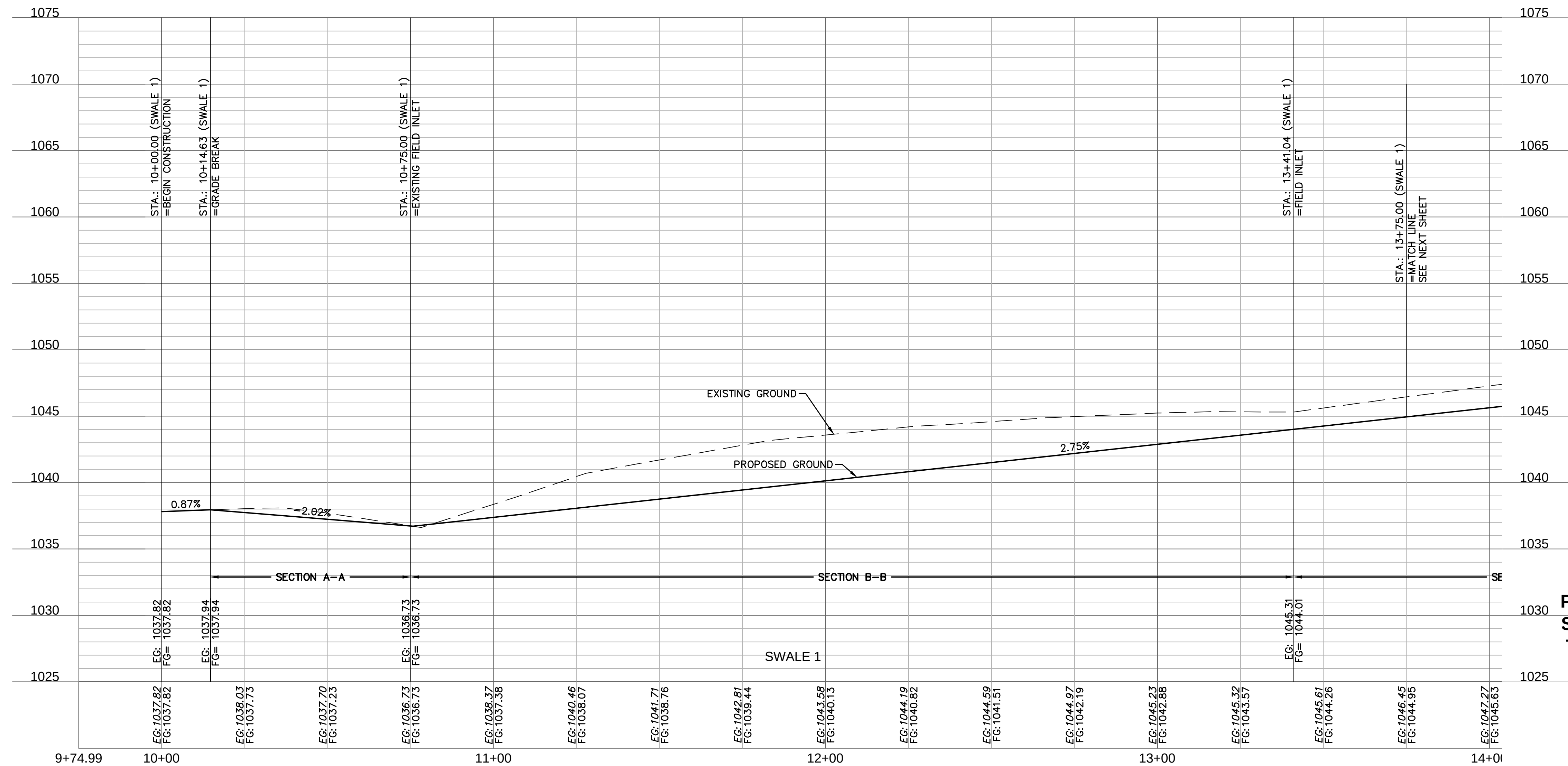
1. CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.

2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.

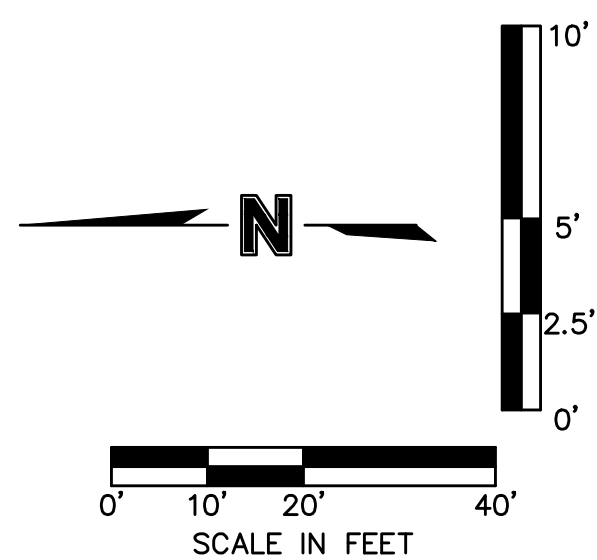


SECTION	Mannings Coefficient	Channel Slope (%)	SECTION DATA					RESULTS						
			Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft²)
A-A	0.03	2.02%	1.5	3:1	3:1	5	7.76	0.39	2.41	3.22	7.47	7.34	0.39	0.41
B-B	0.03	2.75%	1.5	3:1	3:1	5	22.11	0.64	4.43	4.99	9.05	8.84	0.73	0.84
C-C	0.03	2.75%	1.5	3:1	3:1	6	6.05	0.31	1.84	3.29	6.96	6.86	0.34	0.45

Section	Drainage Area (ac.)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
A-A	1.18	0.51	5	10.32	1.25	7.76
B-B	3.36	0.51	5	10.32	1.25	22.11
C-C	0.92	0.51	9.16	10.32	1.25	6.05



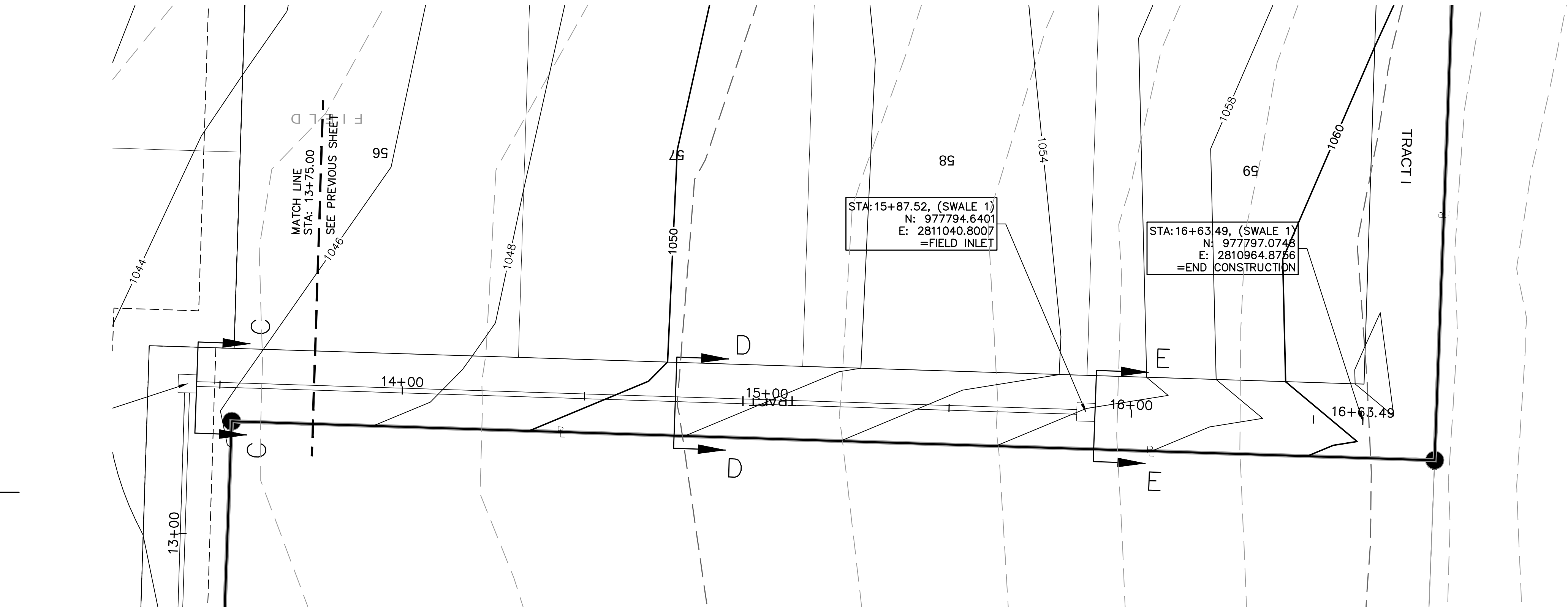
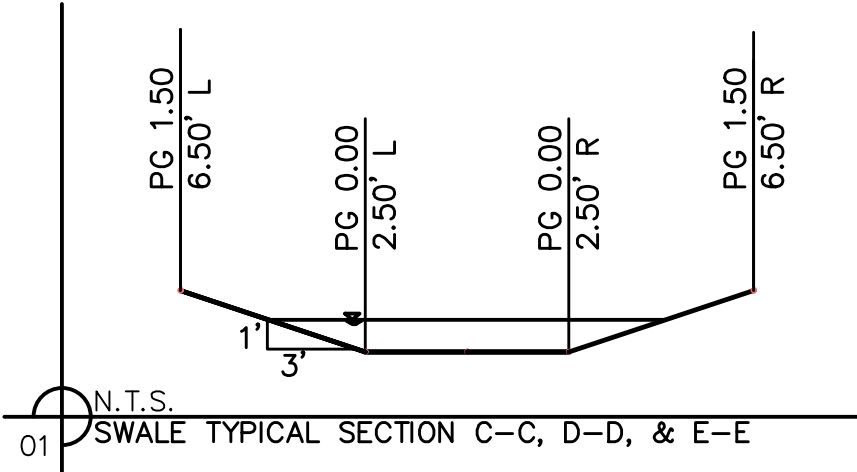
NOT AS-BUILT
PER OSAGE 3RD PLAT PLANS,
SWALE WAS ELIMINATED DUE
TO REDUCTION IN DRAINAGE
AREA. OSAGE 3RD PLAT IS
ACTIVELY UNDER
CONSTRUCTION AT TIME OF
THESE AS-BUILTS



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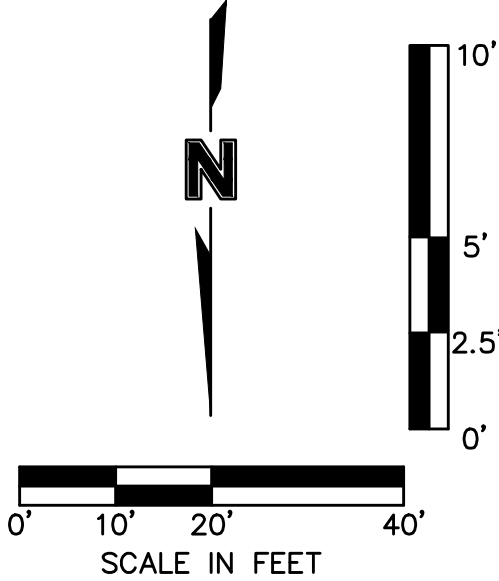
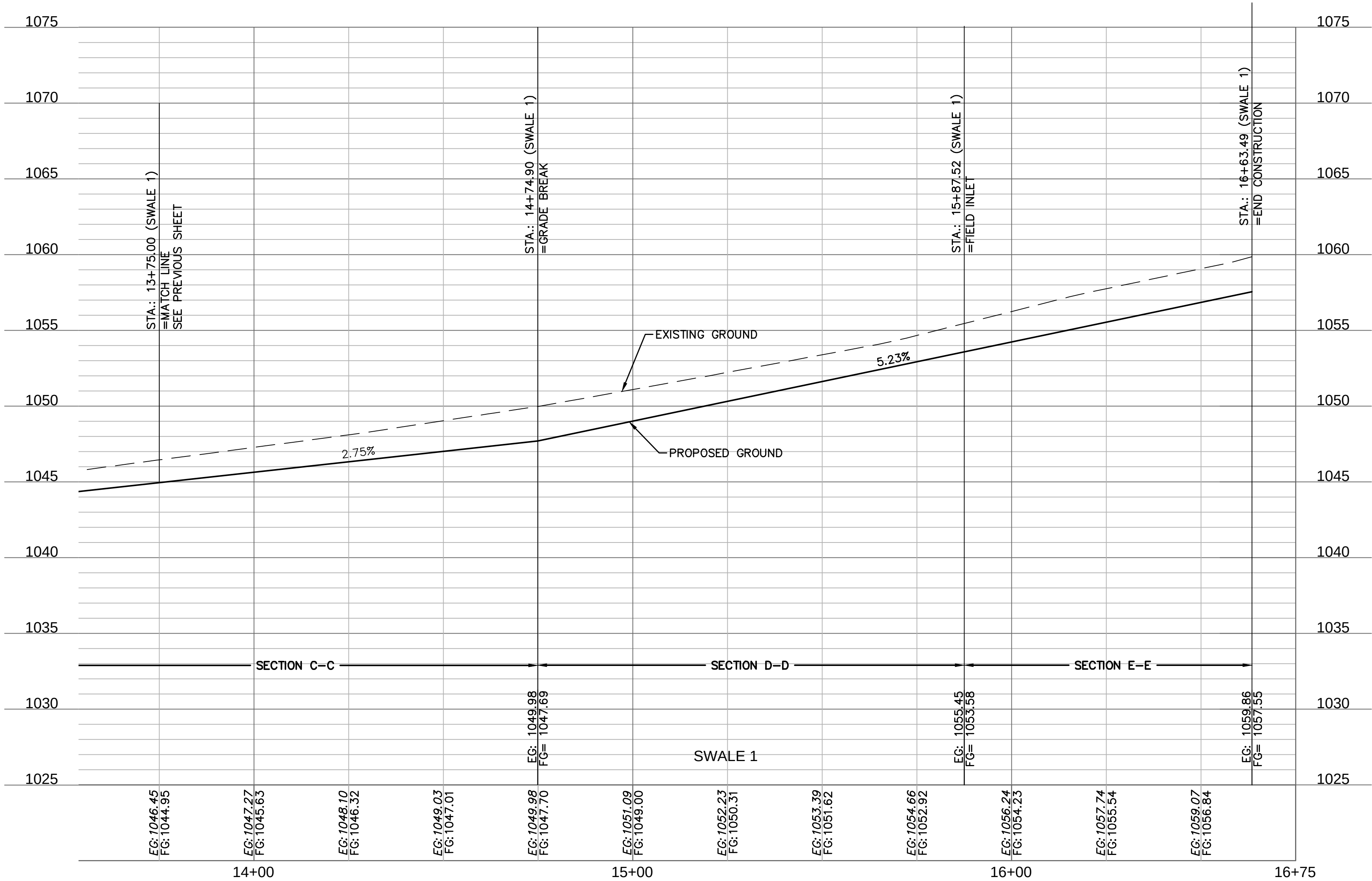
SWALE GRADING NOTES:

1. CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)												
SECTION DATA							RESULTS					
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)
C-C	0.03	2.75%	1.5	3:1	3:1	5	6.05	0.31	1.84	3.29	6.96	6.86
D-D	0.03	5.23%	1.5	3:1	3:1	5	1.64	0.12	0.64	2.55	5.76	5.72
E-E	0.03	5.23%	1.5	3:1	3:1	5	1.71	0.13	0.70	2.44	5.82	5.78

Swale Drainage Area Table (100 year Return Frequency)					
Section	Drainage Area (ac.)	C	Tc (min)	i (in/hr)	K
C-C	0.92	0.51	9.16	10.32	1.25
D-D	0.25	0.51	9.16	10.32	1.25
E-E	0.26	0.51	5.00	10.32	1.25



NOT AS-BUILT
PER OSAGE 3RD PLAT PLANS,
SWALE WAS ELIMINATED DUE
TO REDUCTION IN DRAINAGE
AREA. OSAGE 3RD PLAT IS
ACTIVELY UNDER
CONSTRUCTION AT TIME OF
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JULIE ELAINE
SELLERS
NUMBER
PE-2017000367
5/26/2022

REVISIONS

SWALE 1 PLAN & PROFILE (CONT'D)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

2020

drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

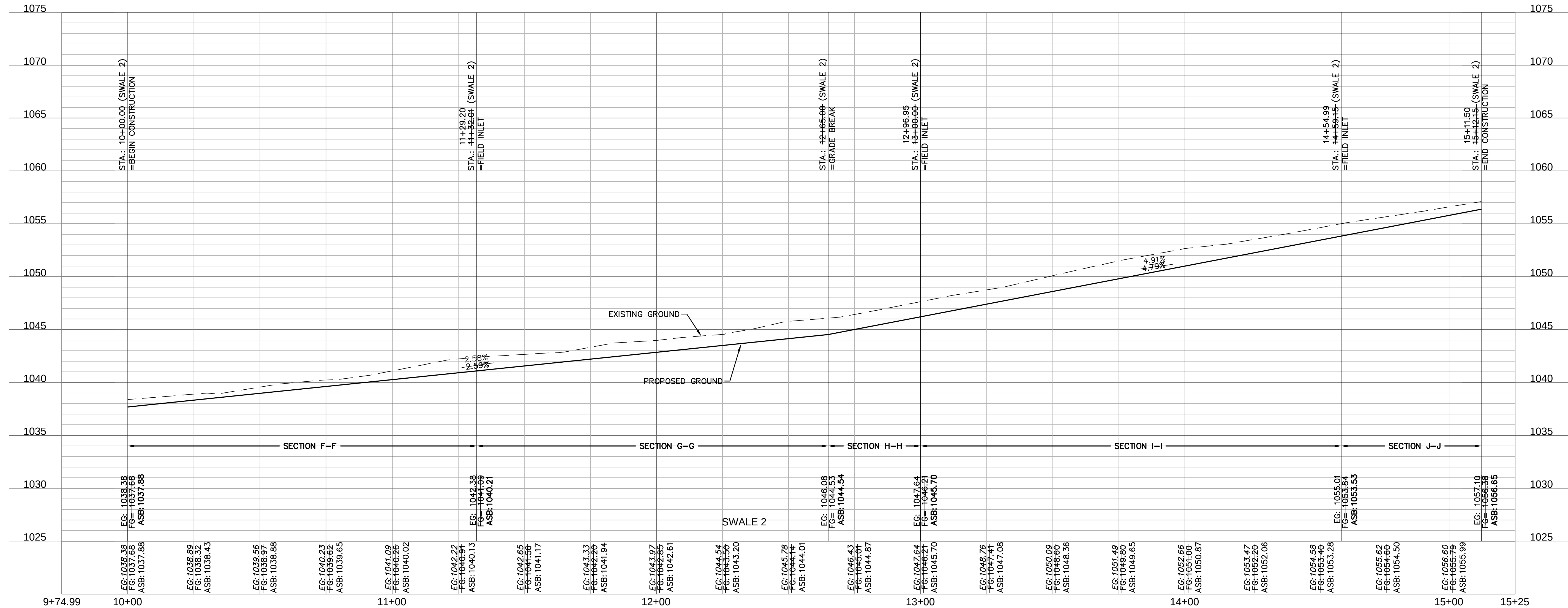
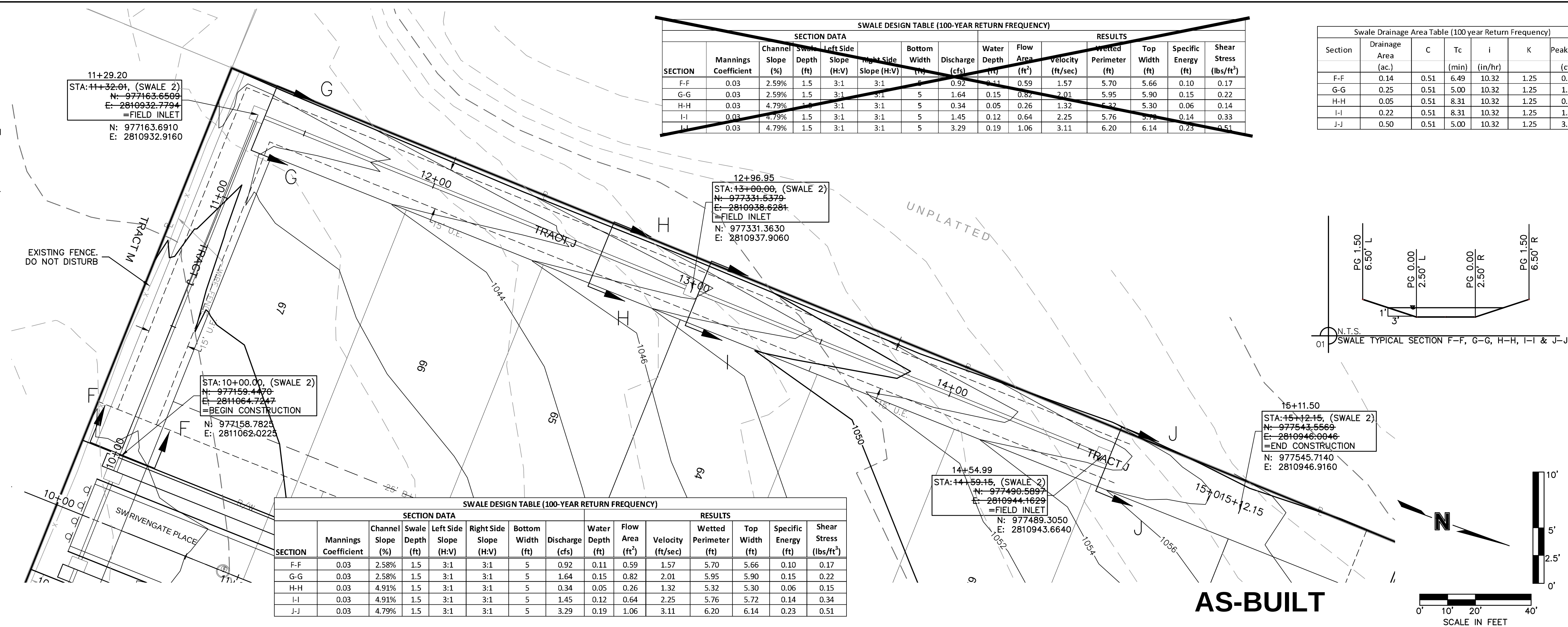
SHEET
C107

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1. CONTRACTOR SHALL
CONSTRUCT SWALES WITH
MINIMUM SLOPE, WIDTH
AND DEPTH AS SHOWN IN
THE SWALE DESIGN
TABLES.

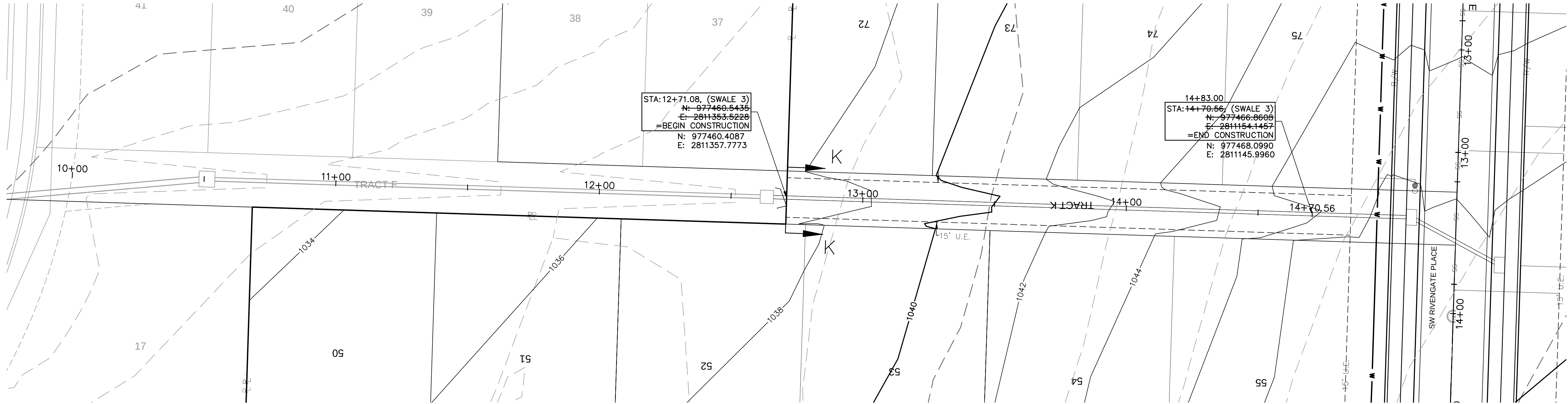
2. AS-BUILT SURVEY IS
REQUIRED/APPROVED BY
CITY FOR ALL SWALES
AND PRIOR TO APPROVAL
FOR ANY BUILDING
FOUNDATION PERMIT.

CONTRACTOR SHALL BE
REQUIRED TO REGRADE
SWALES AT
CONTRACTOR'S EXPENSE
IF ABOVE REQUIREMENTS
ARE NOT MET.



SWALE 2 PLAN & PROFILE STREET & STORM SEWER PLANS		REV. NO.	DATE	REVISIONS DESCRIPTION			Olsson - Civil Engineering Missouri Certificate of Authority #: 001592 1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 www.olsson.com
OSAGE SECOND PLAT							
2020		REVISIONS					
drawn by: _____		D.F. / M.O. / A.A. _____					
checked by: _____		C.G.W. _____					
QA/QC by: _____		A.A. _____					
project no.: _____		J.E.S. _____					
drawing no.: _____		C19-2339 _____					
date: _____		2022.05.26 _____					
SHEET C108							

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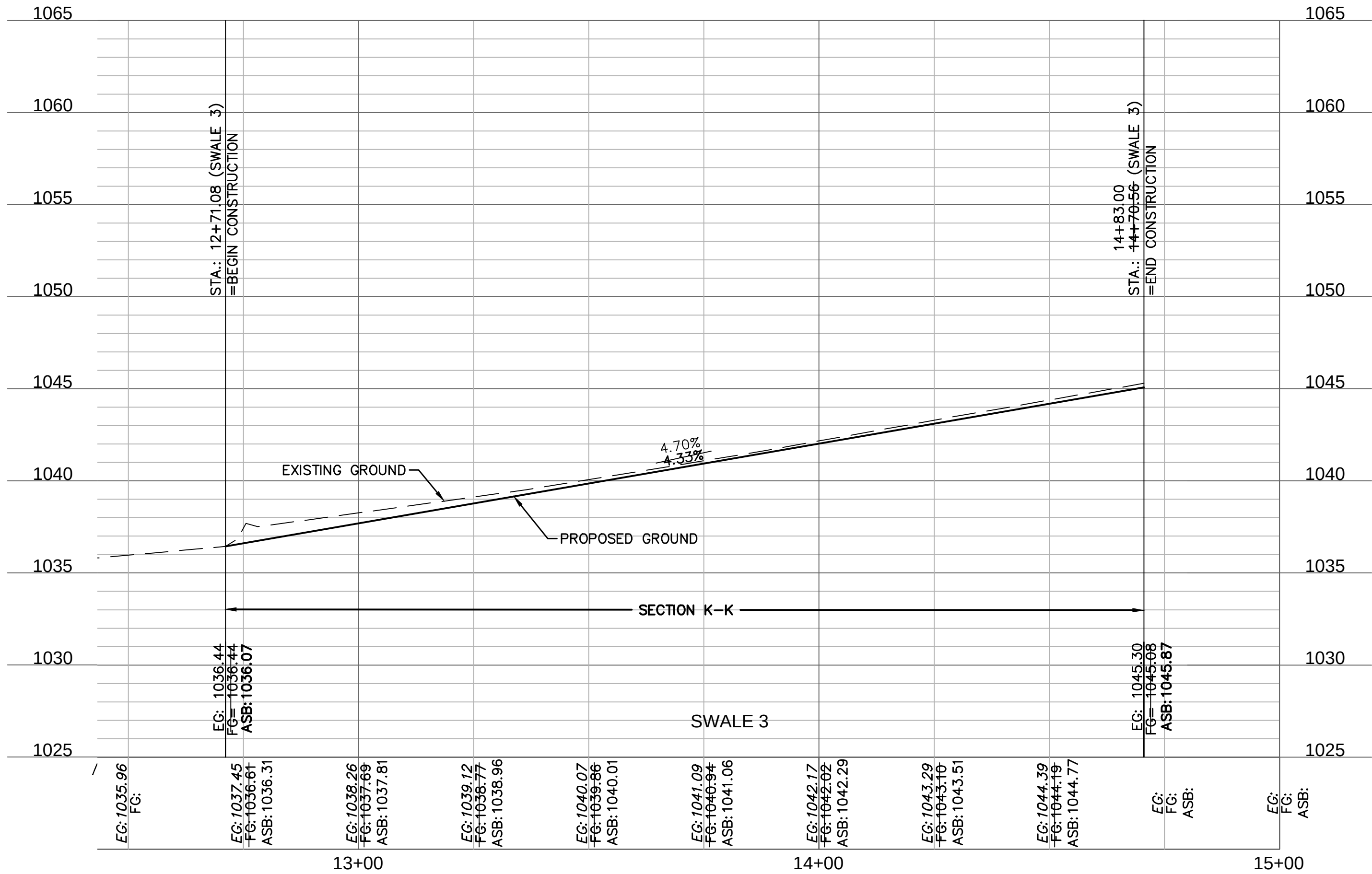
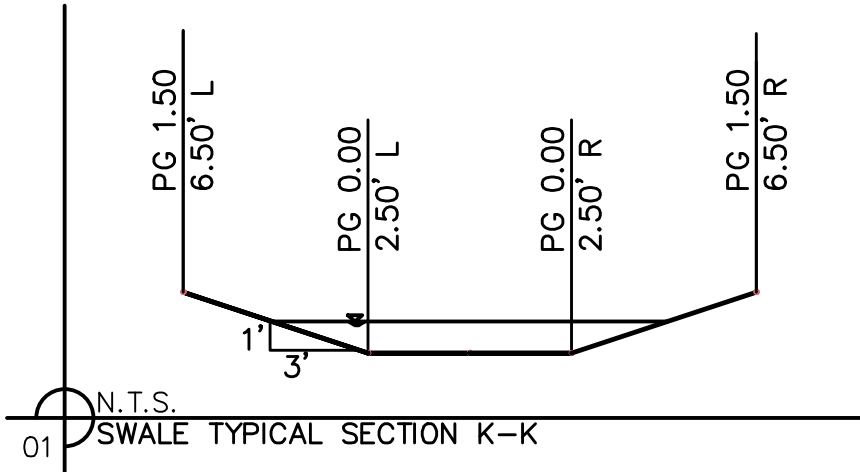
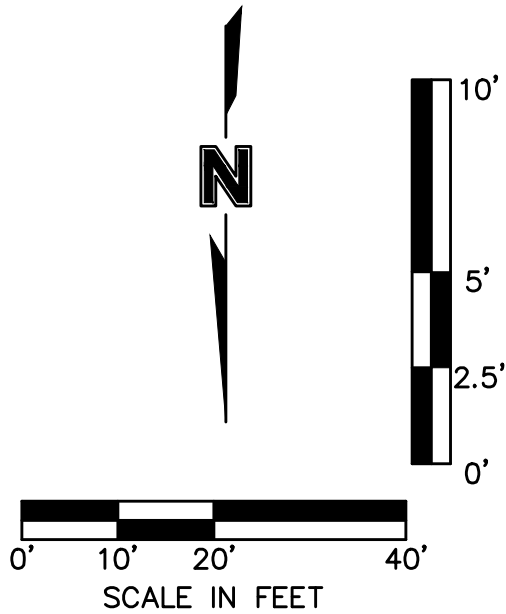


SWALE GRADING NOTES:
1. CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.

SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)													
SECTION DATA							RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)
K-K	0.03	4.33%	1.5	3:1	3:1	5	1.68	0.13	0.70	2.40	5.82	5.78	0.33

SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)													
SECTION DATA							RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)
K-K	0.03	4.70%	1.5	3:1	3:1	5	1.68	0.13	0.70	2.40	5.82	5.78	0.35

Swale Drainage Area Table (100 year Return Frequency)						
Section	Drainage Area (ac.)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
K-K	0.26	0.51	5	10.32	1.25	1.68



AS-BUILT

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STATE OF MISSOURI
JULIE ELAINE SELLERS
Professional Engineer
NUMBER PE-2017000367
5/26/2022

REVISIONS

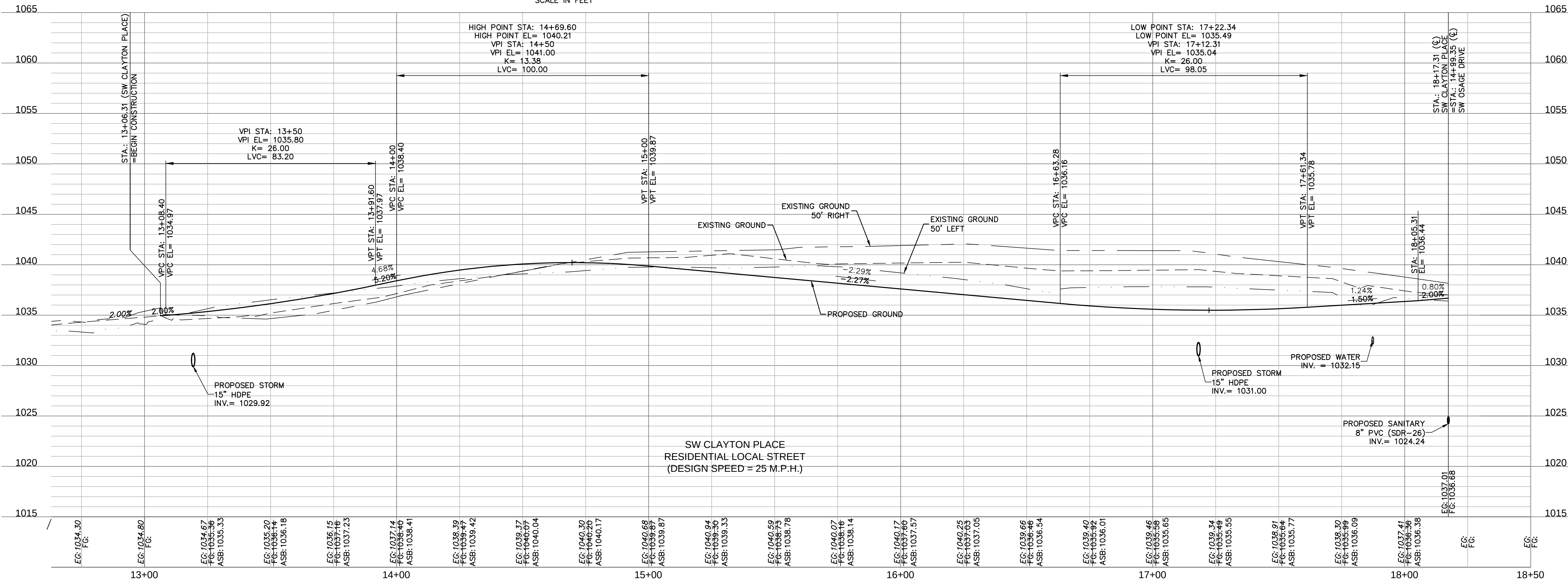
2020

SWALE 3 PLAN & PROFILE
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

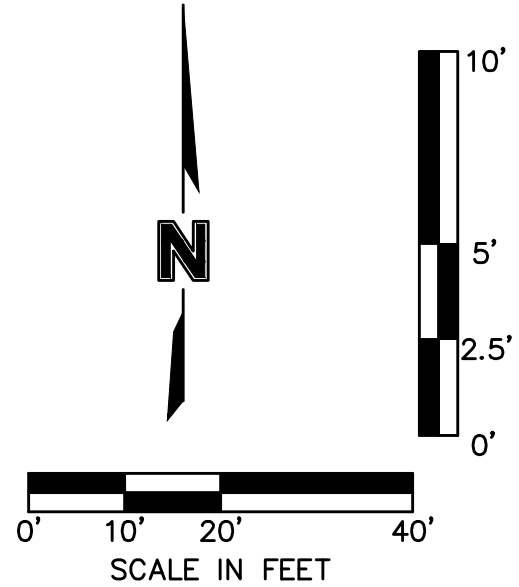
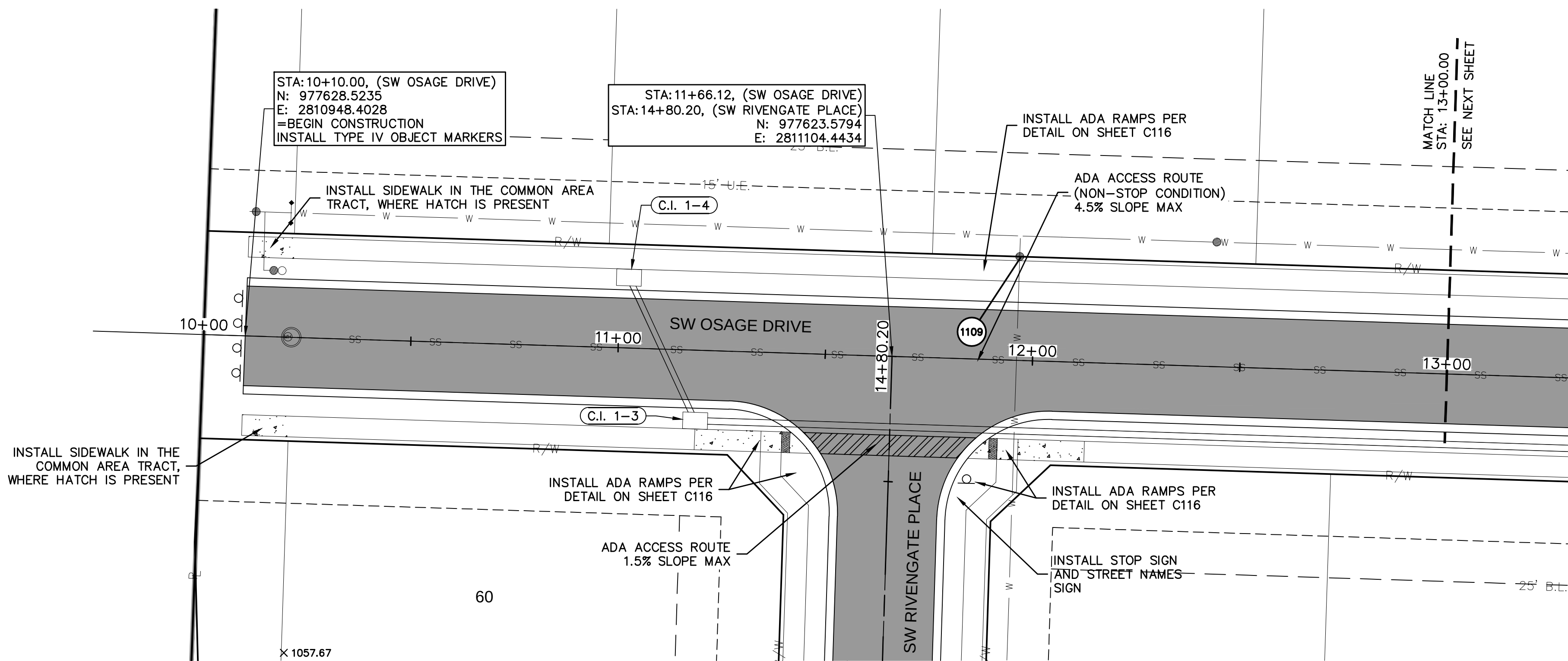
drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C109

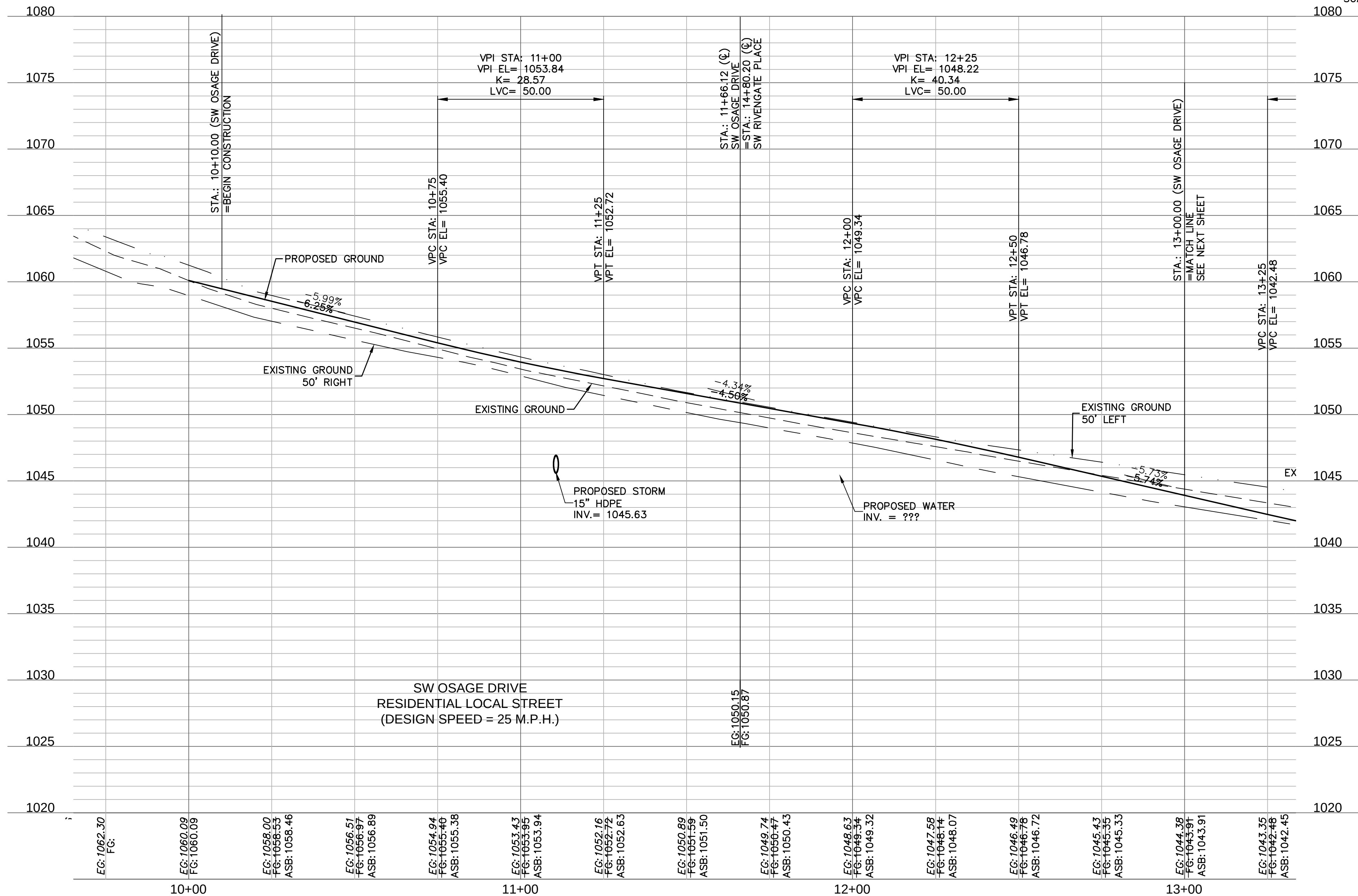


AS-BUILT

[illegible]



LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER



AS-BUILT

ROADWAY PLAN & PROFILE (SW OSAGE DRIVE)
STREET & STORM SEWER PLANS

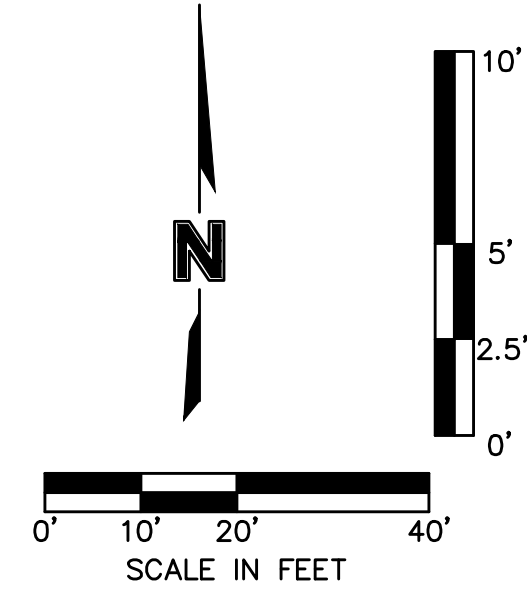
OSAGE
SECOND PLAT

2020

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checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C111

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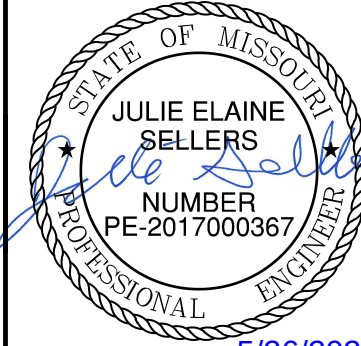
**ROADWAY PLAN & PROFILE (SW OSAGE DRIVE CONT'D)
STREET & STORM SEWER PLANS**

SHEET
C112

REV. NO.	DATE	REVISIONS DESCRIPTION
1	2020.10.23	REVISED PER CITY COMMENTS

REVISIONS

2020



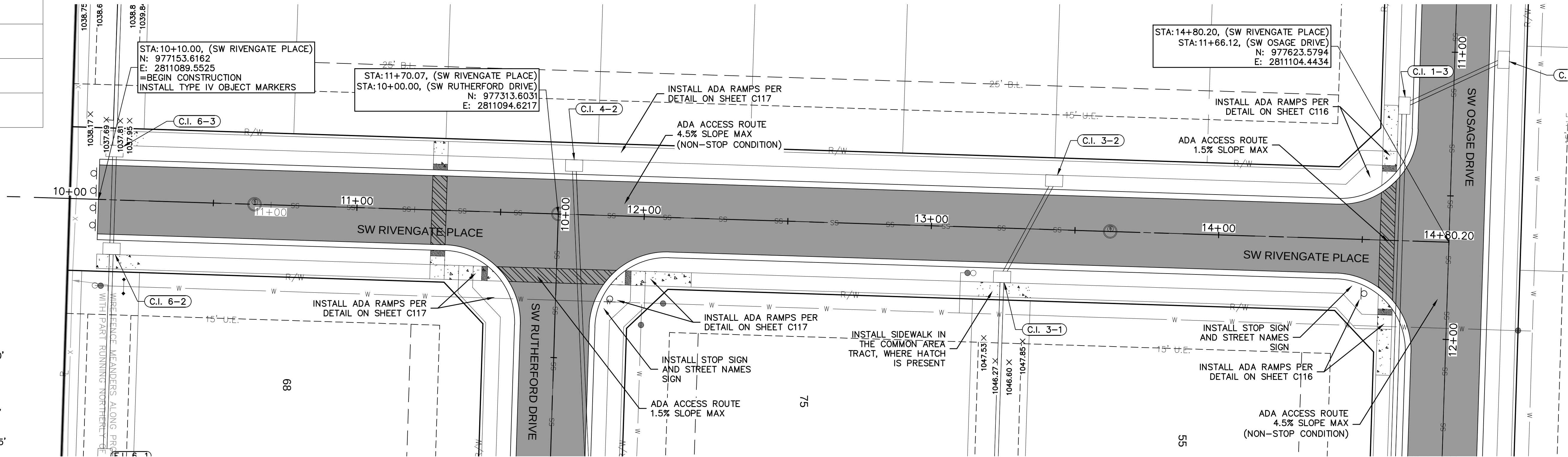
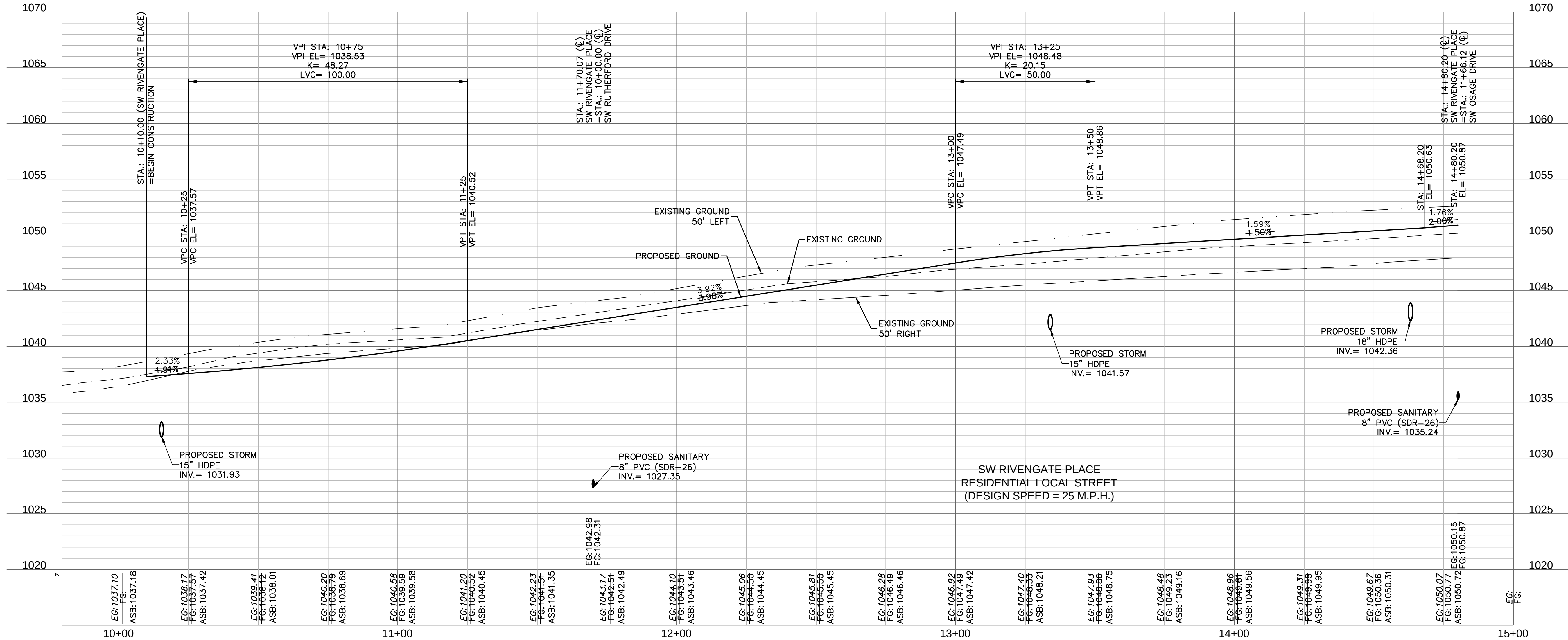
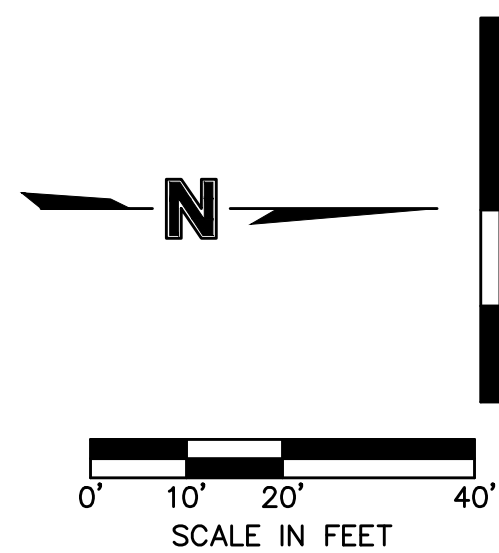
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LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER



AS-BUILT

ROADWAY PLAN & PROFILE (SW RIVENGATE PLACE)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

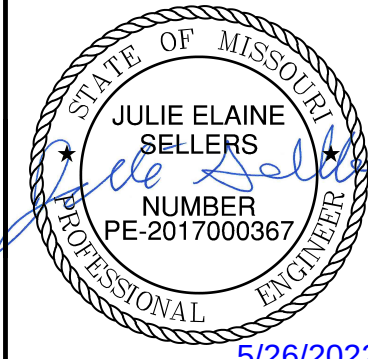
2020

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION
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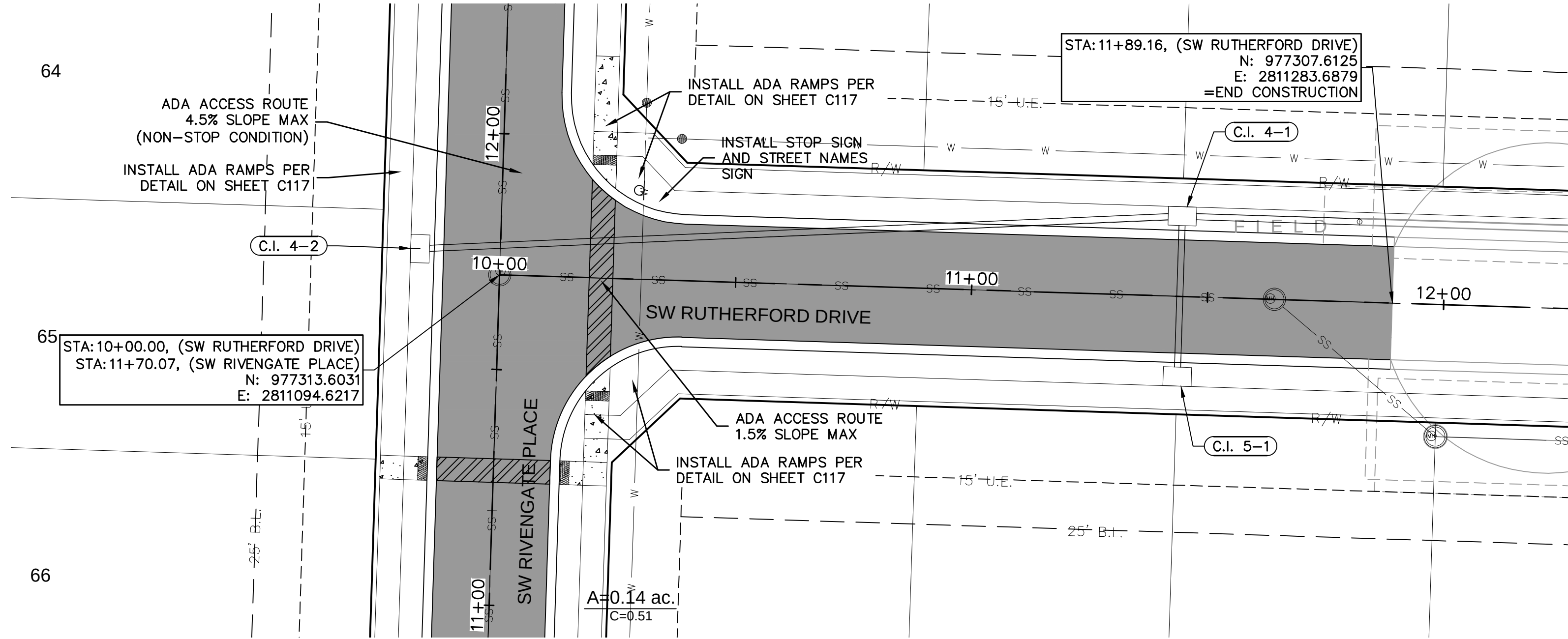
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checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C113

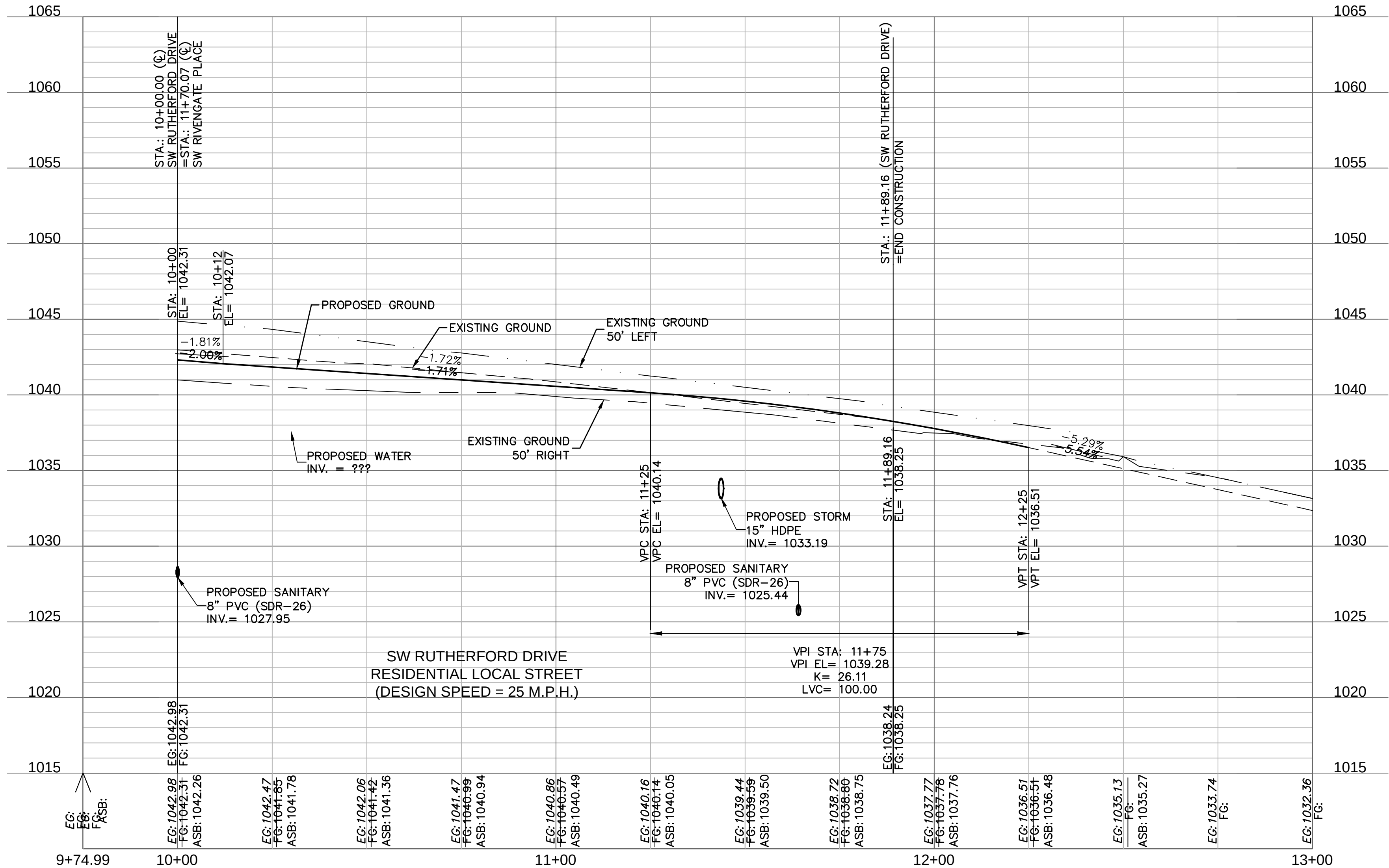
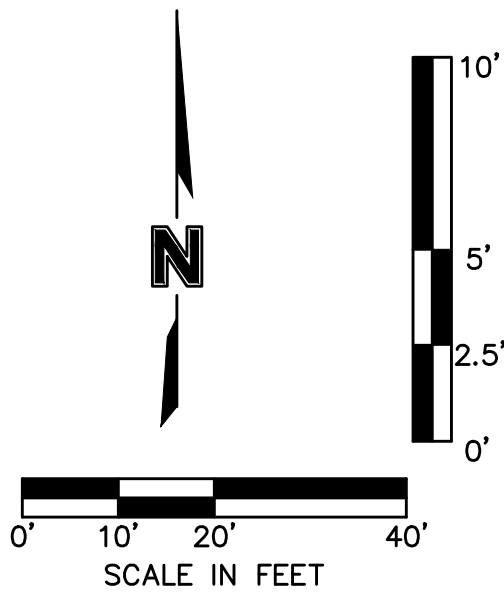


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LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER



AS-BUILT

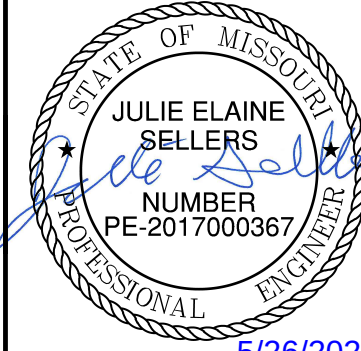
ROADWAY PLAN & PROFILE (SW RUTHERFORD DRIVE)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

2020

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION
1	2020.10.23	REVISOR PER CITY COMMENTS



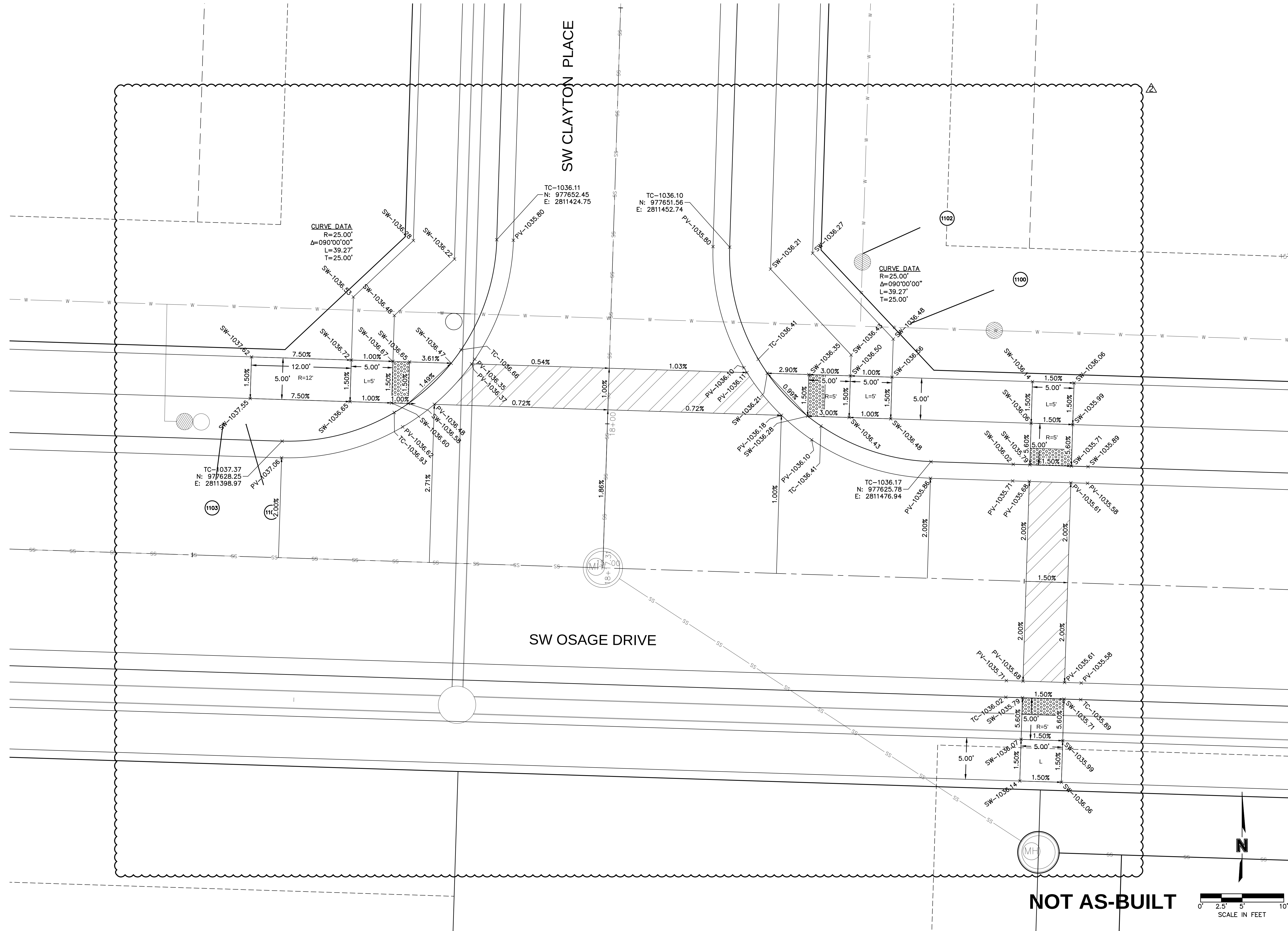
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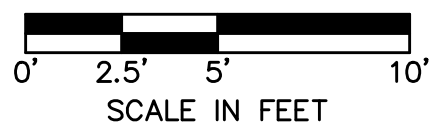
SHEET
C114

drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

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NOT AS-BUILT



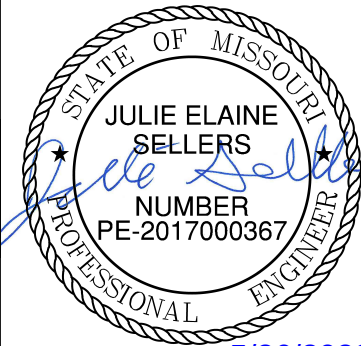
SW OSAGE DRIVE AND SW CLAYTON PLACE INTERSECTION
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

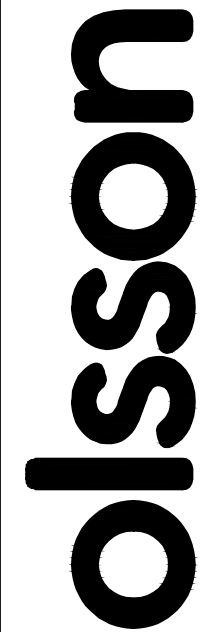
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REV. NO.	DATE	REVISIONS DESCRIPTION
2	2021.10.22	REVISED PER CITY COMMENTS

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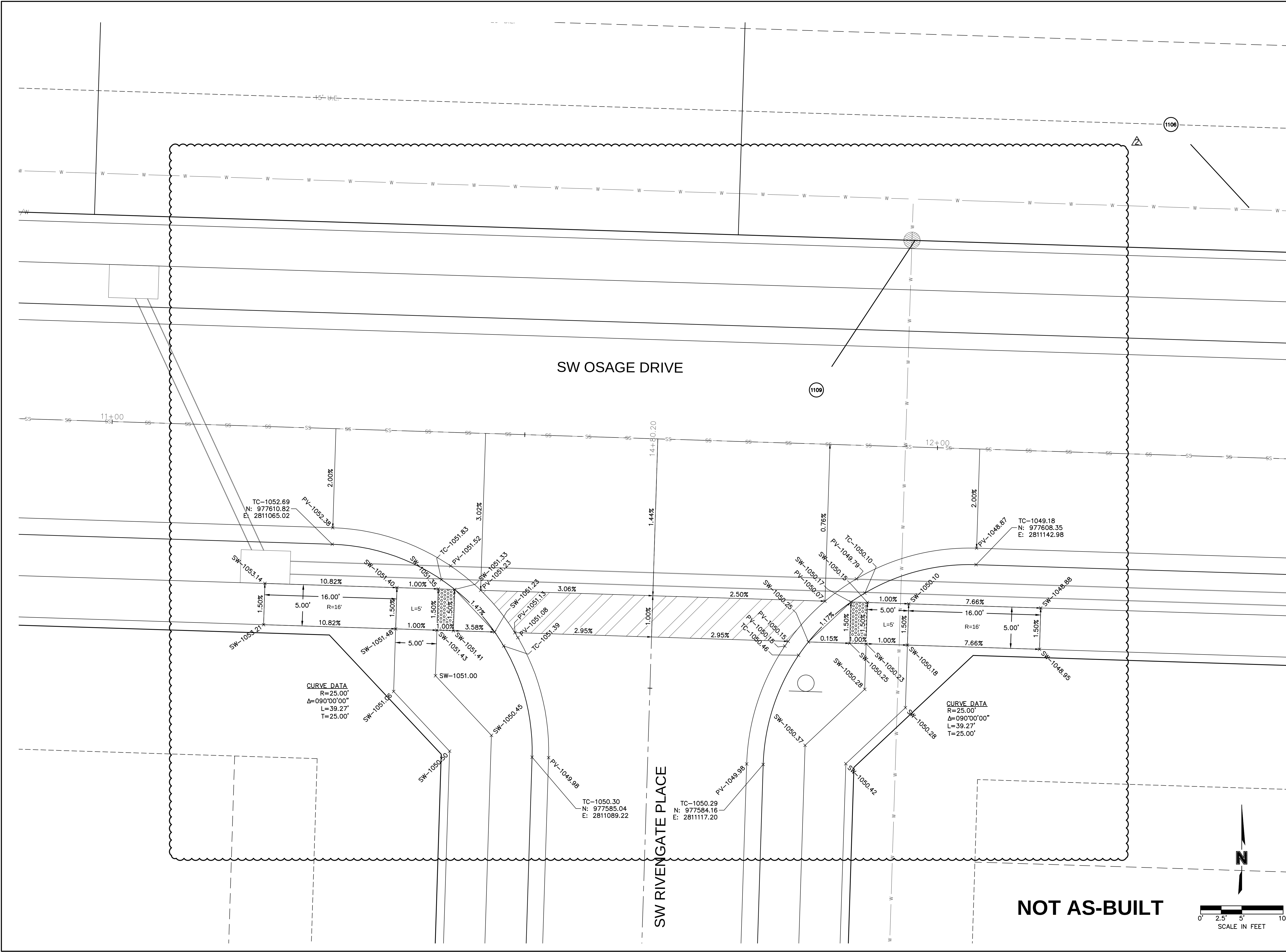
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
5/26/2022

REV. NO.	DATE	REVISIONS DESCRIPTION
2	2021.10.22	REVISED PER CITY COMMENTS

REVISIONS

SW OSAGE DRIVE AND SW RIVENGATE PLACE INTERSECTION
STREET & STORM SEWER PLANS

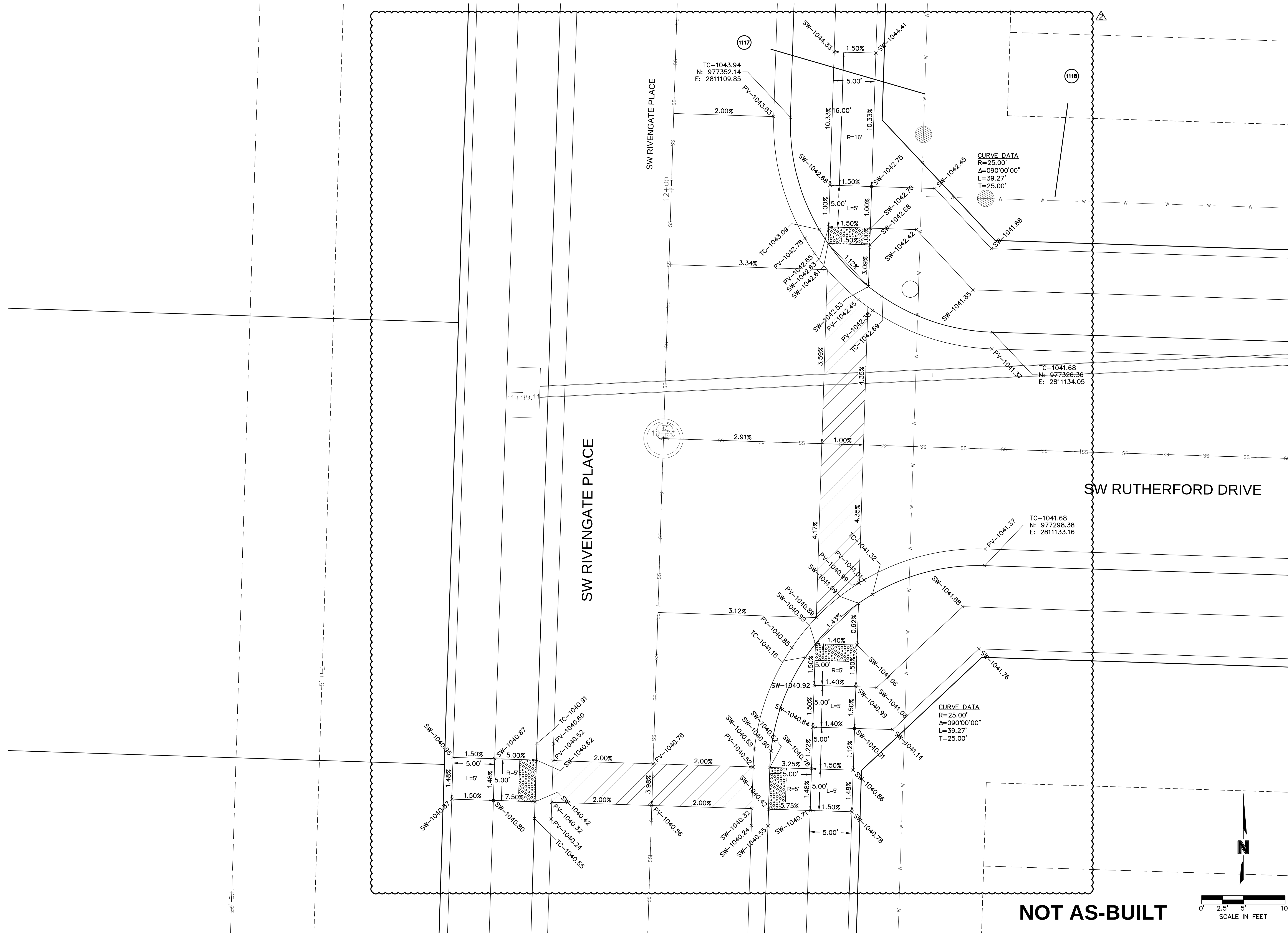
OSAGE
SECOND PLAT

2020

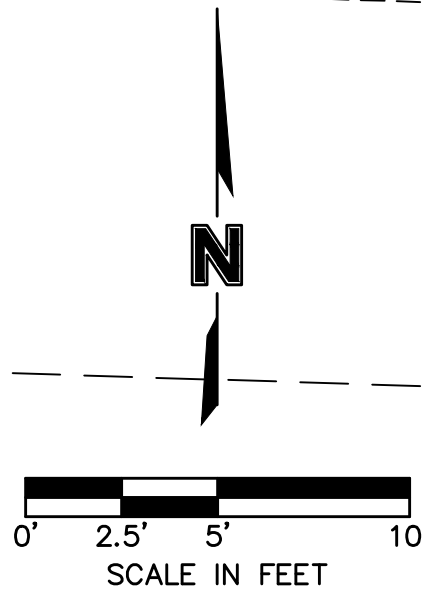
drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C116

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NOT AS-BUILT



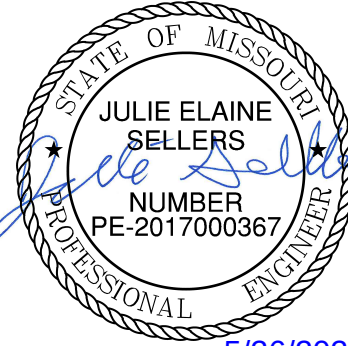
SW RIVENGATE PLACE AND SW RUTHERFORD DRIVE INTERSECTION STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

2020

REV. NO.	DATE	REVISIONS DESCRIPTION
2	2021.10.22	REVISED PER CITY COMMENTS

DEV/VERSION



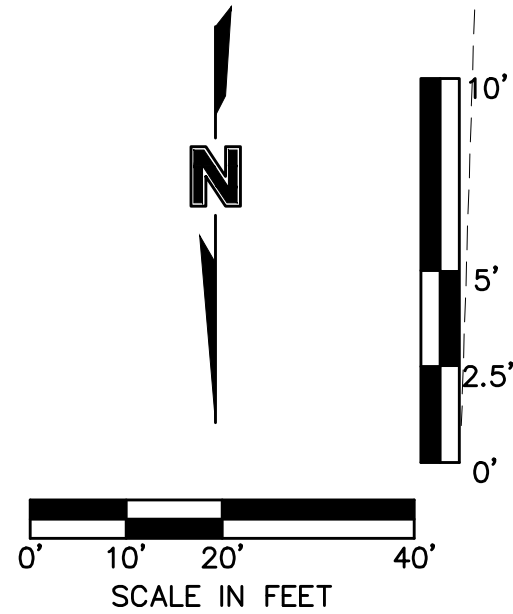
5/26/2022

olsion

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TEI 916 261 1177

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AS-BUILT IS 0.11' S AND
0.41' W OF PLAN

C.I. 1-3
CURB INLET (5'X3' INSIDE)
STA: ~~14+96.12~~ (STORM LINE 1) 14+96.54
~~STA: 11+19.12, 17.00~~ RT (SW OSAGE DRIVE)
N: ~~977608.076~~ 11+18.71, 17.12'
E: ~~2811056.929~~
N: 977607.970
E: 2811056.518

AS-BUILT IS 0.27' S
AND 0.65' E OF PLAN

C.I. 1-4
15+33.99 CURB INLET (5'X3' INSIDE)
STA: ~~45+34.15~~ (STORM LINE 1)
STA: ~~44+02.08, 47-00~~ LT (SW OSAGE DRIVE)
11+02.75, 16.75' N: 977642.599
E: 2811040.978
N: 977642.330
E: 2811041.632

AS-BUILT IS 0.11' N AND 0.32' E OF PLAN	
C.I. 1-2 CURB INLET (5'X3' INSIDE) STA: 12+02.50 (STORM LINE 1) 12+02.20 STA: 10+00.00 (STORM LINE 9) STA: 11+12.74, 17+00' RT (SW OSAGE DRIVE) N: 977598.778 E: 281350.399 N: 977598.884	

AS-BUILT IS 1.15' N AND
0.34' E OF PLAN

M.H. 1-1
STD. STORM MANHOLE (4' DIA. INSIDE)
STA: ~~4+32.88~~ (STORM LINE 1) 11+32.51
STA: 10+00.00 (STORM LINE 2)
STA: ~~14+82.35~~, ~~17+00'~~ RT (SW OSAGE DRIVE)
N: ~~977596.573~~ 14+82.73, 18.14'
E: ~~2811419.982~~

N: 977595.426
E: 2811420.326

REMOVE EXISTING PLUG AND
CONNECT TO EXISTING 24" HDPE PIPE
STA: 10+00 (STORM LINE 1)
STA: 16+15.24, 17.00 RT (SW OSAGE DRIVE)
N: 977592.365
E: 2811552.797

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STORM SEWER PLAN & PROFILE (LINE 1)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

2020

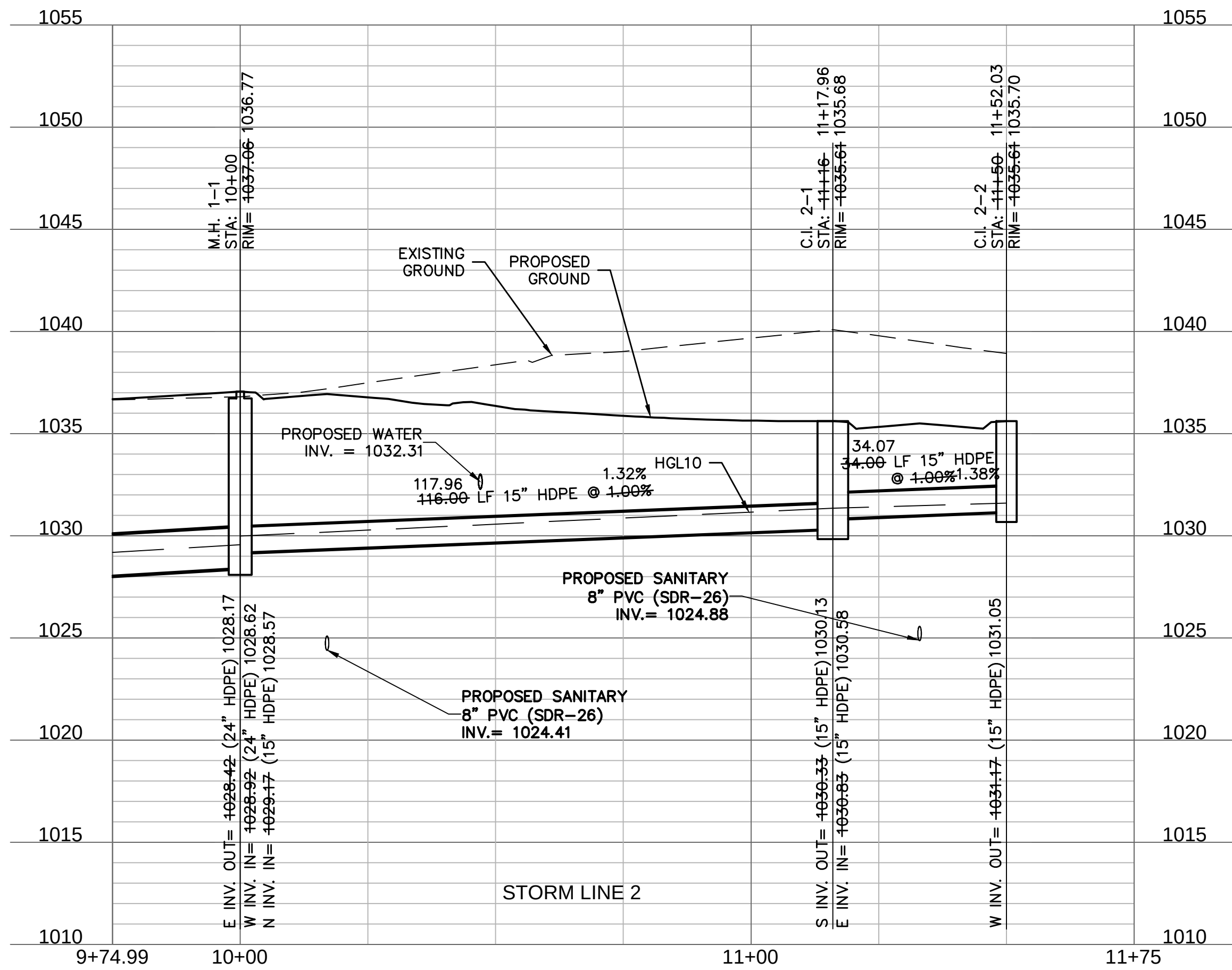
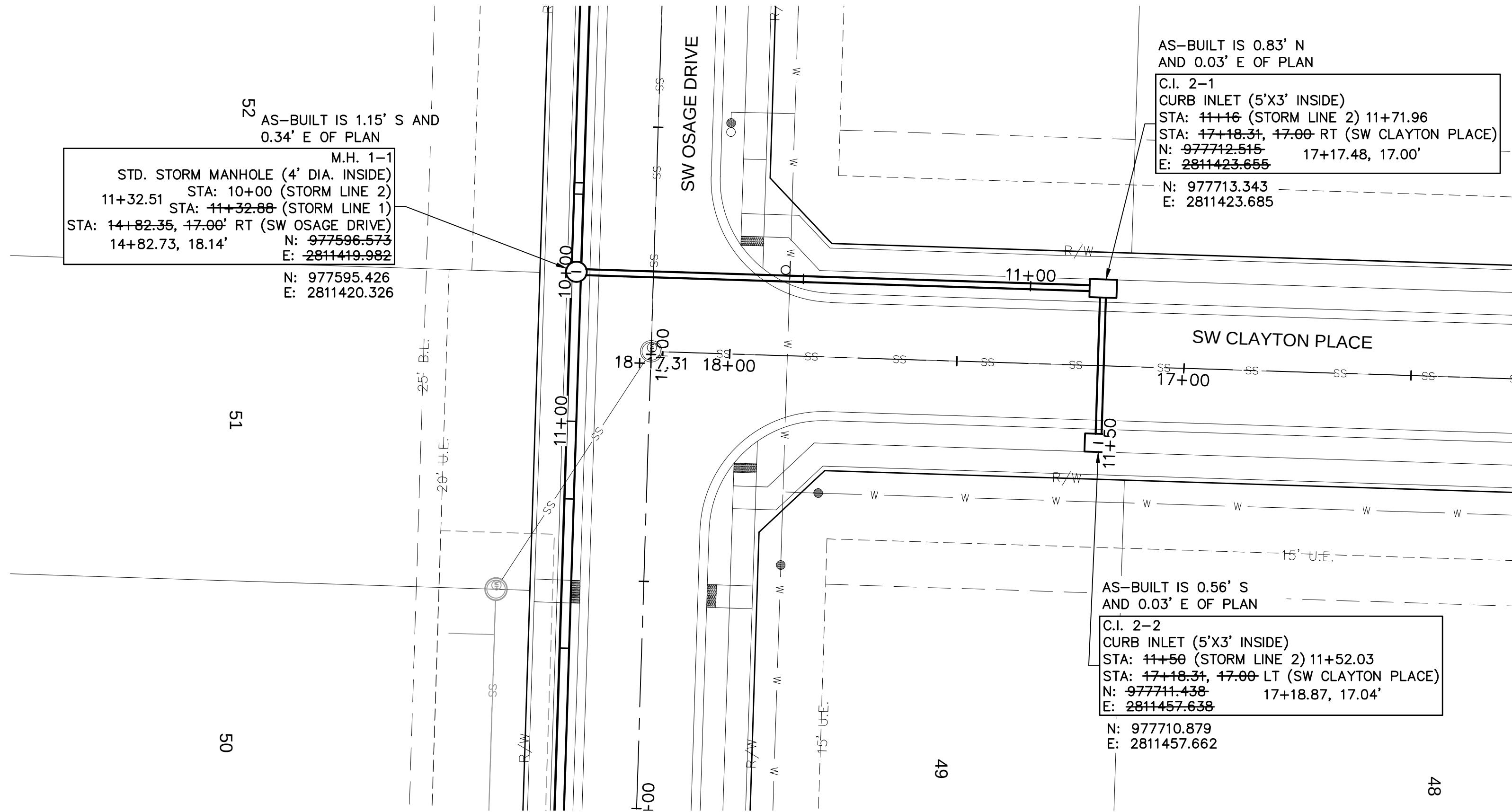
REVISIONS

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North Kansas City, MO 64116
TEL 816.361.1177 www.olsson.com

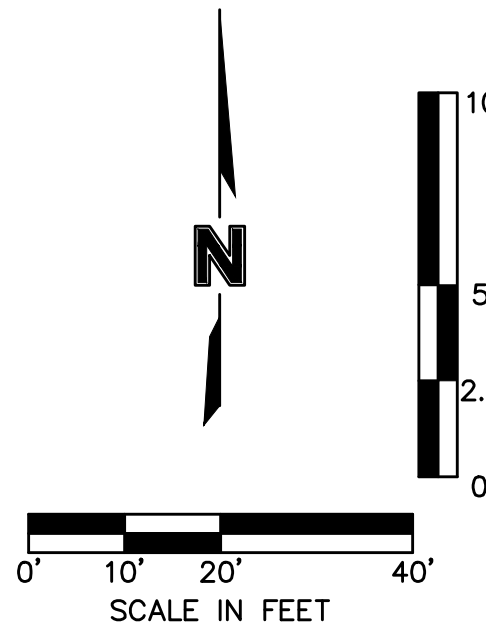
drawn by: D.F. / M.O. / A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.: _____
date: 2022.05.26

SHEE
C118

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AS-BUILT

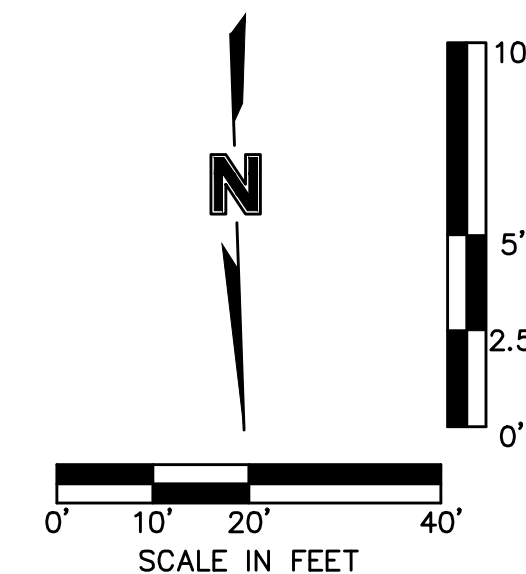
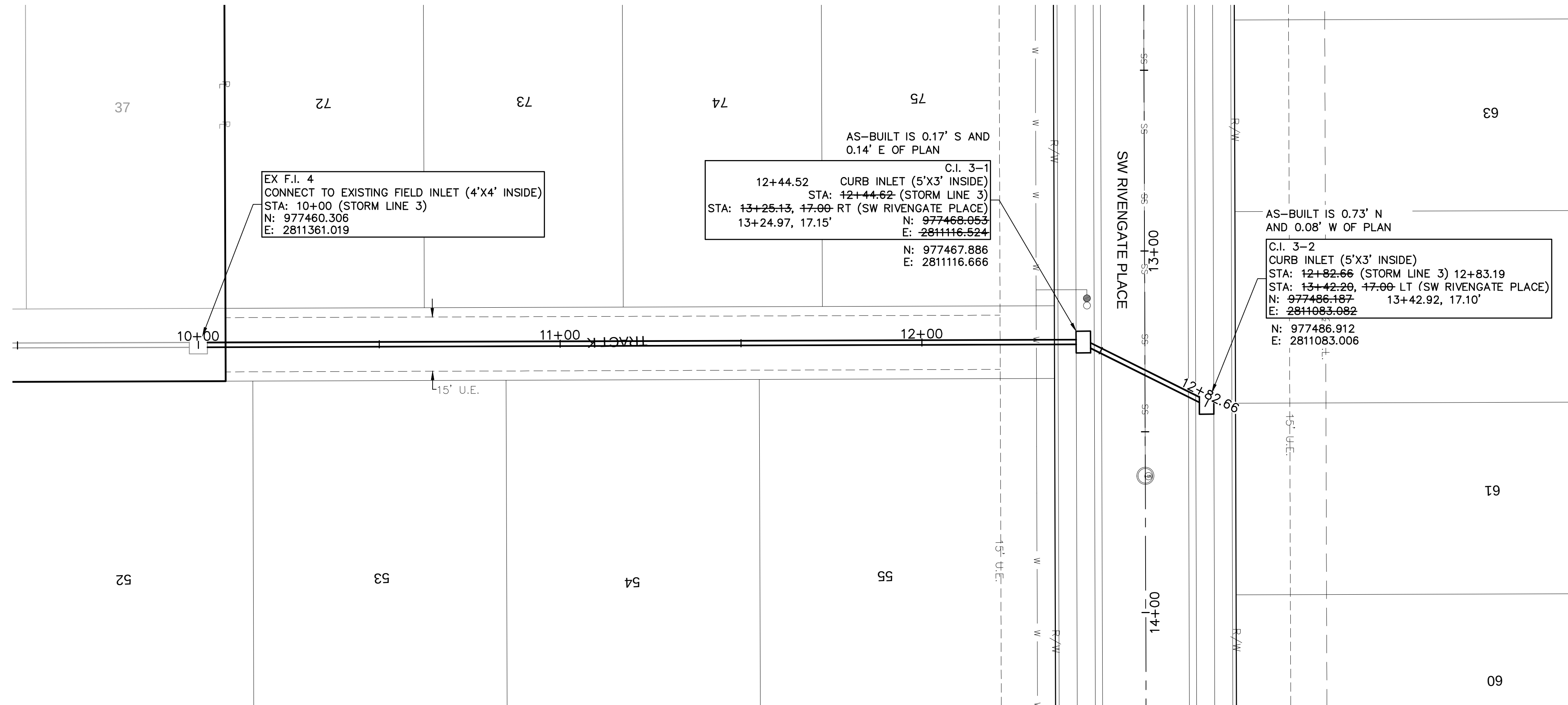
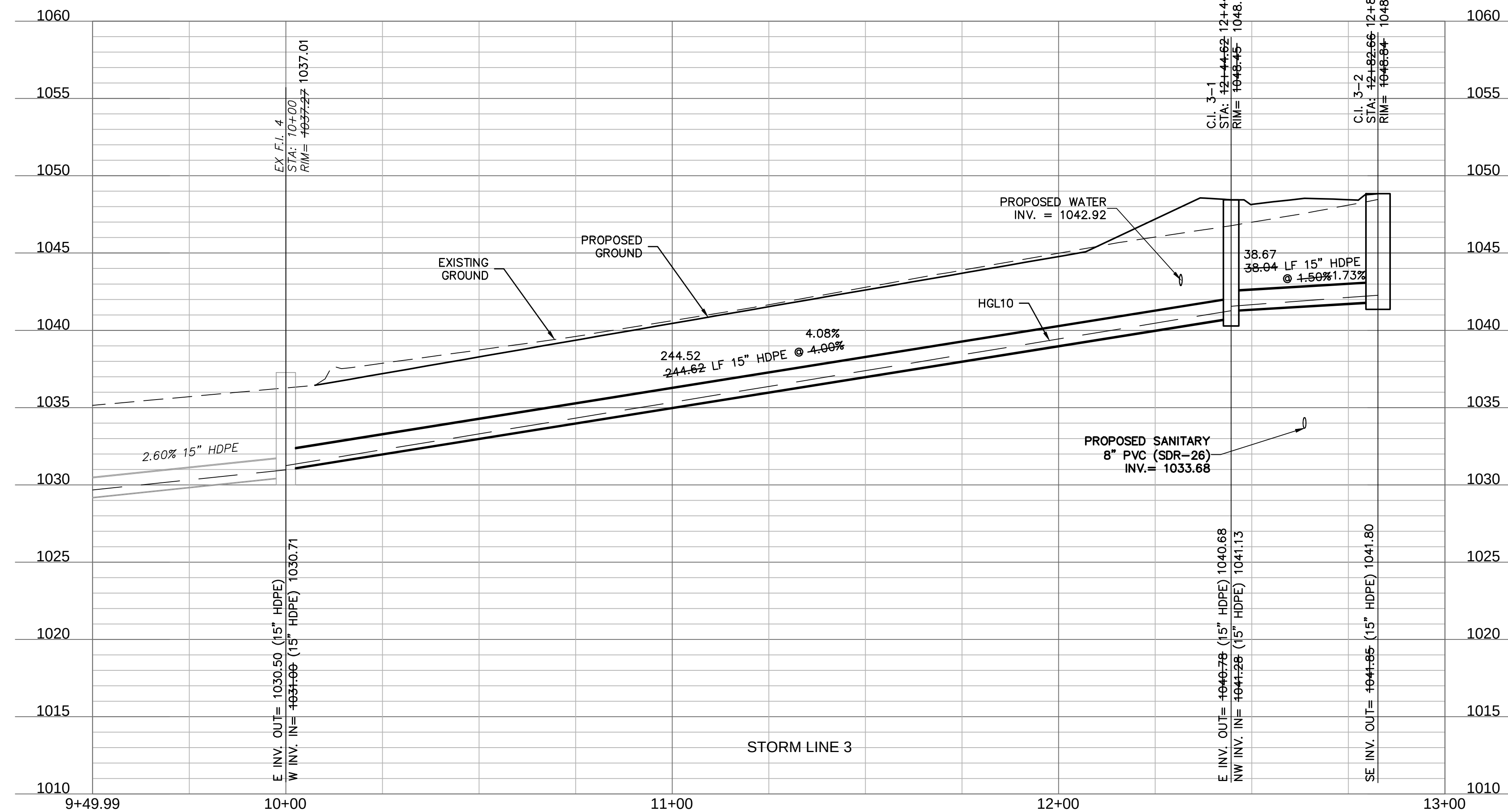


STORM SEWER PLAN & PROFILE (LINE 2) STREET & STORM SEWER PLANS		OSAGE SECOND PLAT		2020
drawn by: D.F./M.O./A.A.		checked by: C.G.W.		
designed by: A.A.		QA/QC by: J.E.S.		
project no.: C19-2339		drawing no.:		
date: 2022.05.26				
SHEET C119		REVISIONS		

5/26/2022

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DWG: F:\2019\2001-2500\019-2339-C\40-Design\AutoCAD\Final Plans - As-Built\Sheets\GNCV\STREET & STORM\C_STM01_C192339.dwg
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AS-BUILT

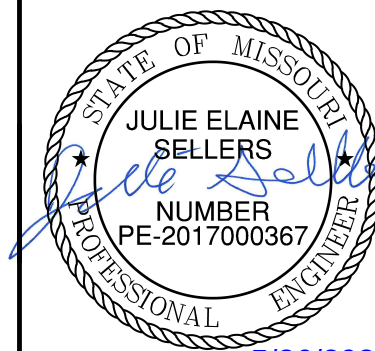
STORM SEWER PLAN & PROFILE (LINE 3)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

2020

[illegible]

REVISIONS



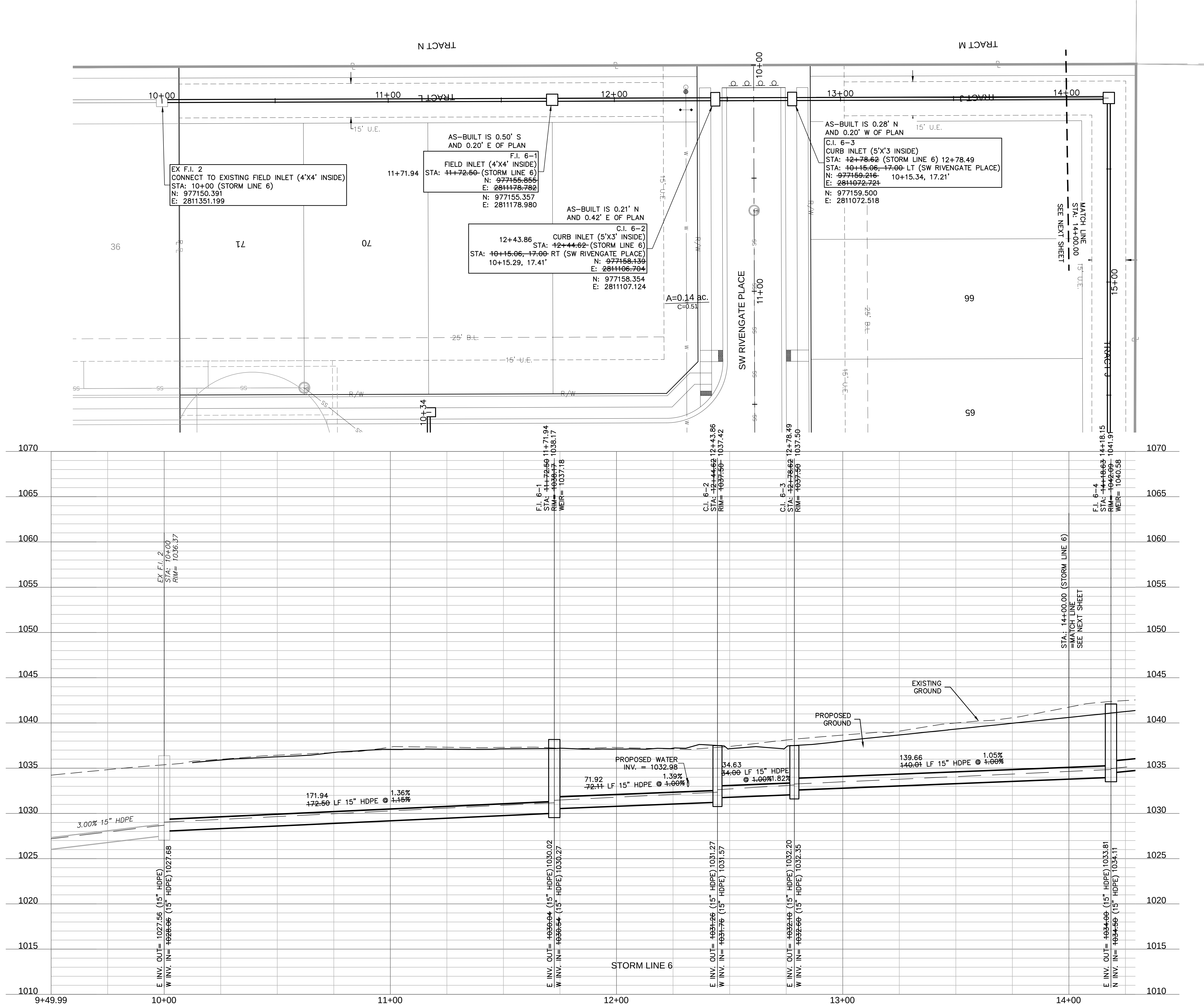
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STATE OF MISSOURI
JULIE ELAINE
SELLERS
NUMBER
PE-2017000367
5/26/2022

REVISIONS

2020

STORM SEWER PLAN & PROFILE (LINE 6)
STREET & STORM SEWER PLANS
SECOND PLAT

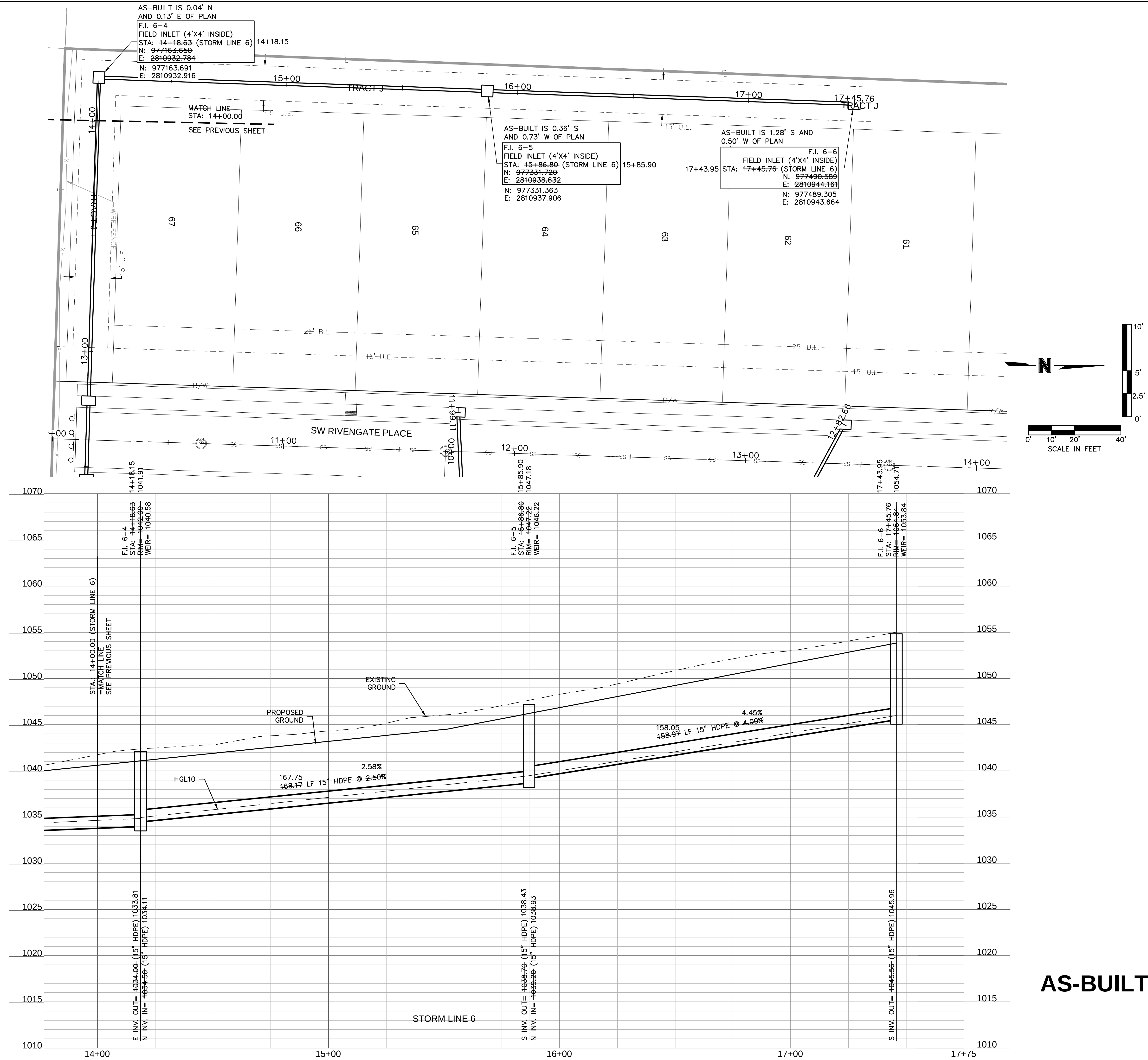
OSAGE
SECOND PLAT

2020

drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C122

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AS-BUILT

STORM SEWER PLAN & PROFILE (LINE 6 CONT'D)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

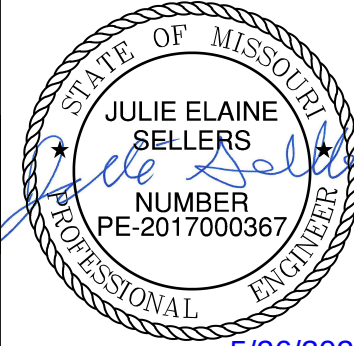
2020

REV. NO.	DATE	REVISIONS DESCRIPTION
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DATE _____

REVISIONS DESCRIPTION

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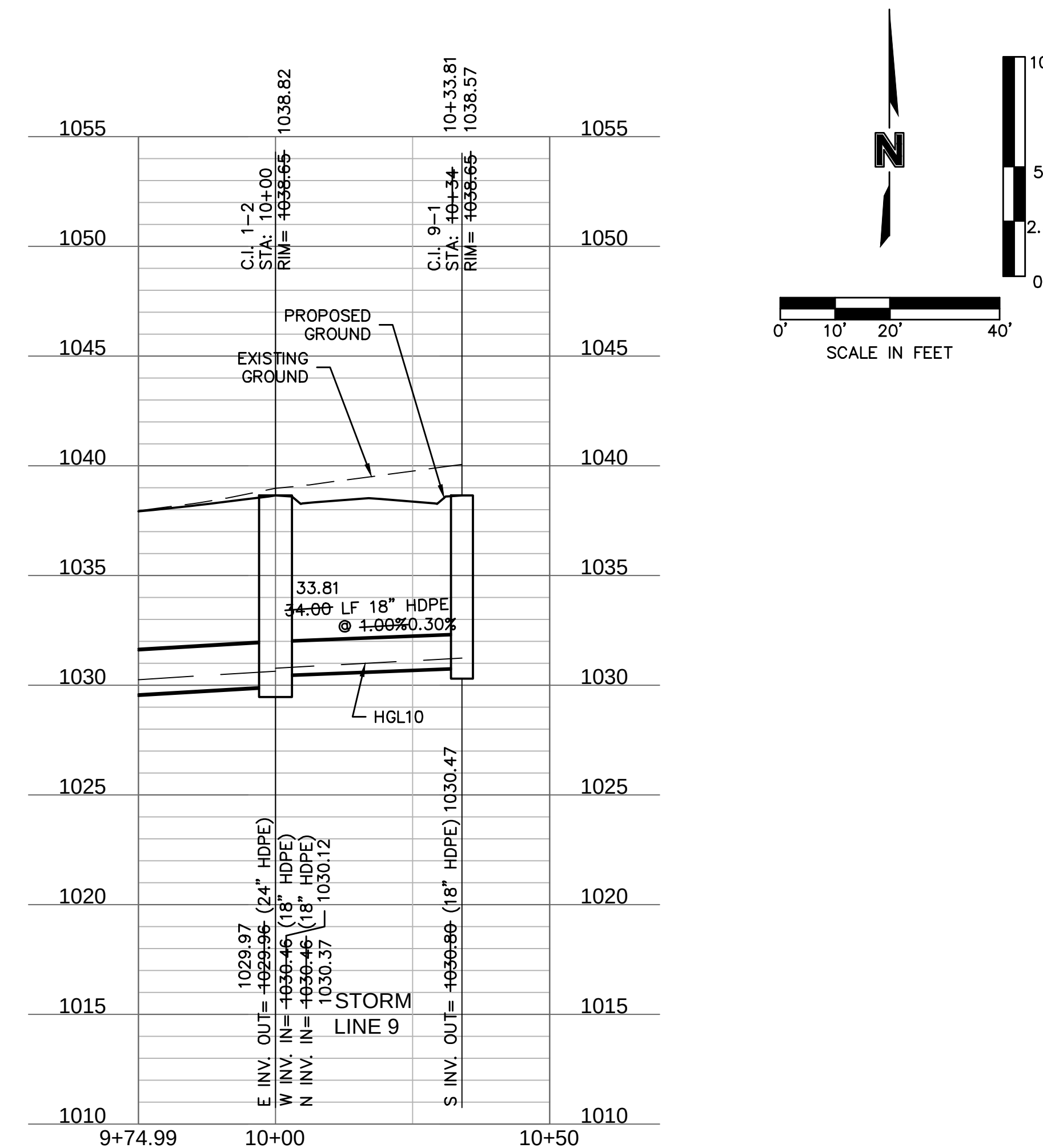
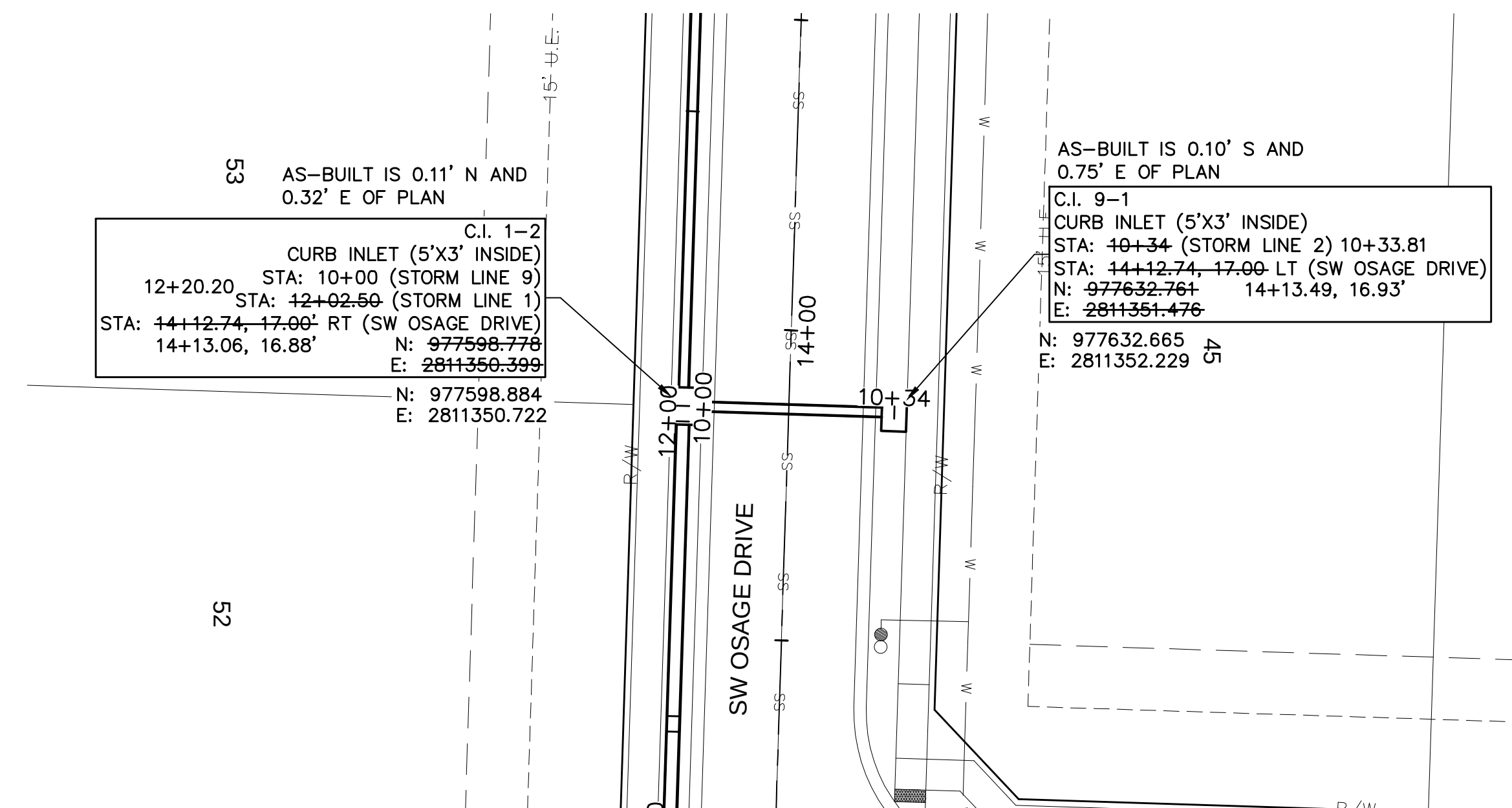
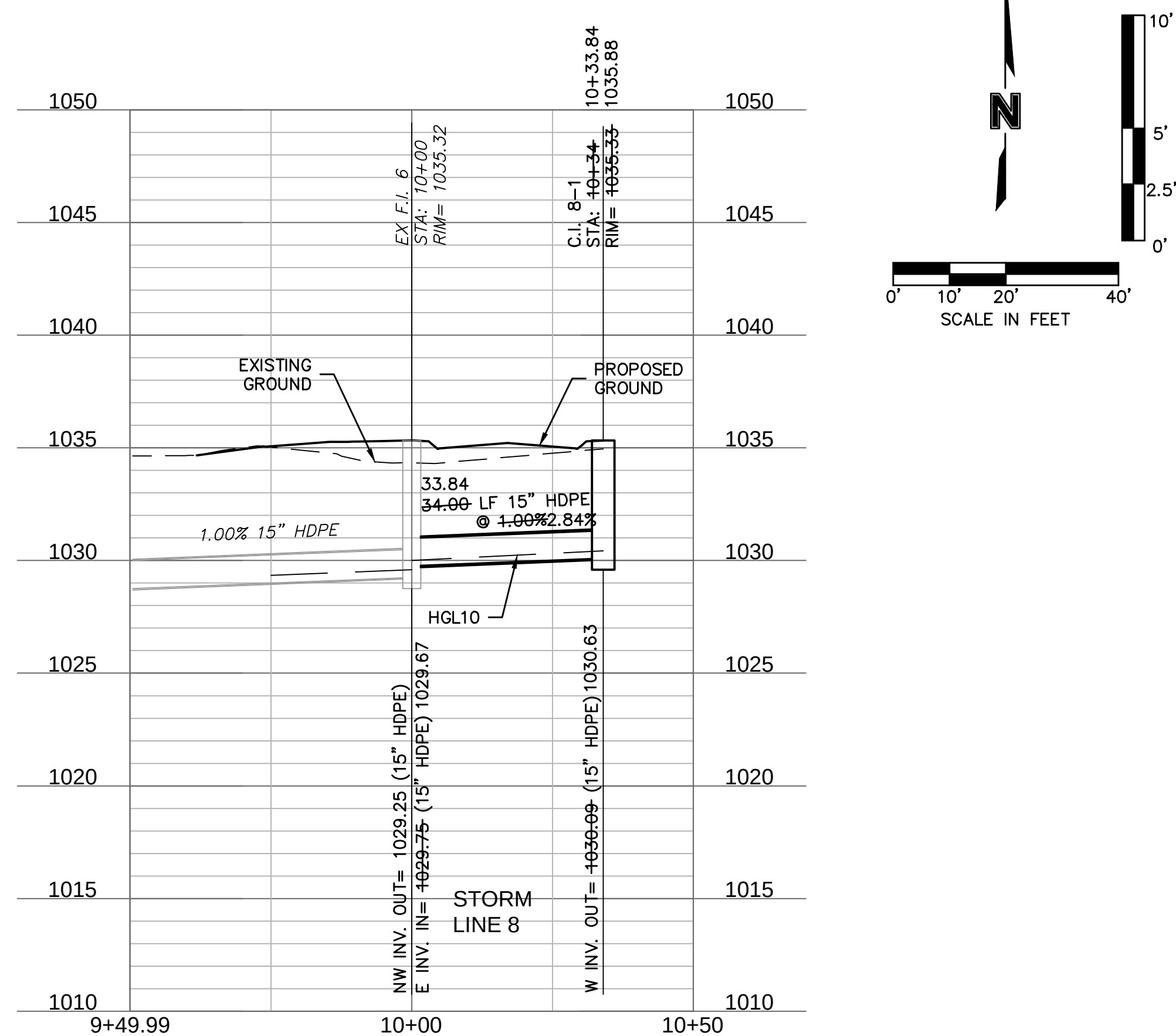
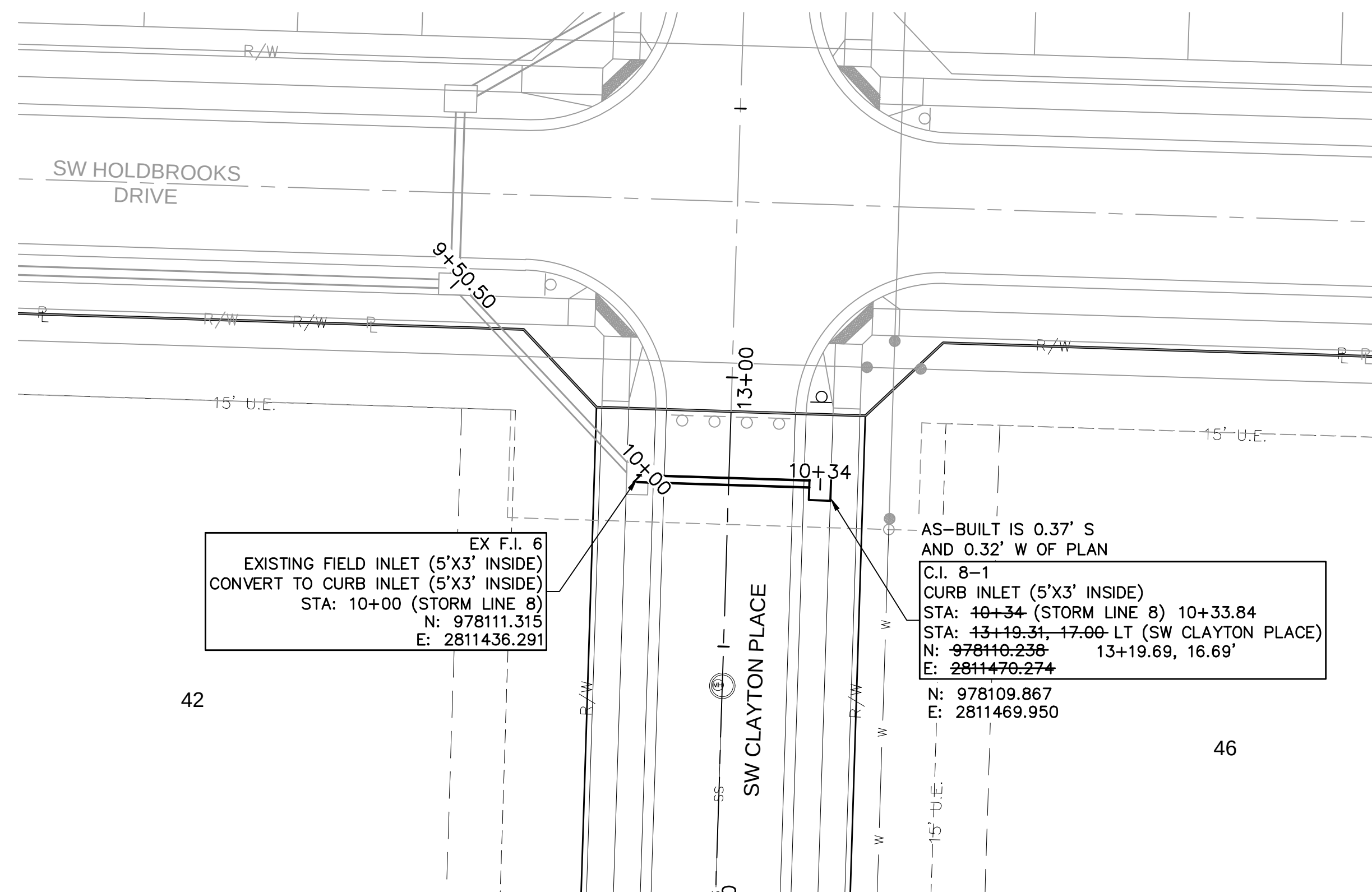


5/26/202

also

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AS-BUILT

LEGEND	
	FINISHED INDEX CONTOURS
	FINISHED INTERMEDIATE CONTOURS

BASEMENT TYPES

- ☐ S STANDARD
☐ W WALKOUT
☐ D DAYLIGHT

NOTES:

MBOE – MINIMUM BUILDING OPENING ELEVATION

NOTES:

1. INDIVIDUAL LOT OWNERS SHALL NOT CHANGE OR OBSTRUCT THE DRAINAGE FLOW LINES OR PATHS ON THE LOTS, AS SHOWN ON THE MASTER DRAINAGE PLAN, UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.

2. PLAT IS LOCATION IN ZONE X, "AREAS OUTSIDE THE 1-PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1-PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1-PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1-PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE"

3. PLAT IS LOCATED OUTSIDE OF ANY REQUIRED BUFFER ZONES FOR NATURAL STREAMS.

4. MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN THE RIGHT AND LEFT SIDE MBOE'S SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

5. REFER TO SHEET C106-C109 FOR SWALE GRADING DETAILS.

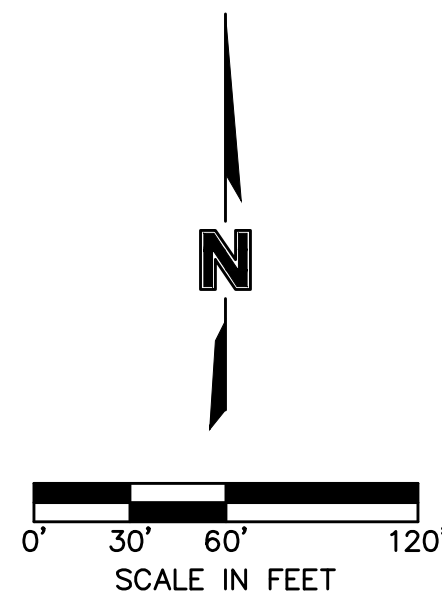
6. DRAINAGE PATHS TO BE CONSTRUCTED BETWEEN EACH OF THE LOTS LABELED AS STANDARD LOTS TO DRAIN WEST.

7. NO BUILDING PERMITS WILL BE ISSUED UNTIL AN AS-GRADED MASTER DRAINAGE PLAN HAS BEEN SUBMITTED TO THE CITY AND APPROVED BY THE CITY.

Osage 2nd Plat			
Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As-Built Grading Required
46	1033.80	1034.73	X
47	1034.73	1033.11	X
48	1033.10	1034.51	X
49	1034.21	1035.60	X
50	1033.54	1035.51	X
51	1035.51	1036.67	X
52	1036.67	1038.18	X
53	1038.18	1041.50	X
54	1041.50	1044.88	X
55	1044.88	1049.20	X
56	1048.96	1046.24	X
57	1051.93	1048.96	X
58	1054.80	1051.93	X
59	1062.78	1054.80	X
60	1038.02	1038.19	X
68	1037.77	1038.02	X
70	1036.89	1037.77	X
71	1036.08	1036.89	X
72	1040.45	1038.25	X
73	1043.08	1040.45	X
74	1045.58	1043.08	X
75	1048.76	1045.58	X

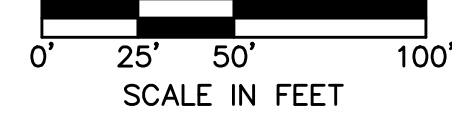
X indicates condition applies to the lot.
MBOE's have been provided per lot lines,
facing the lot from the street. Interpolation
will be allowed between the right and left
side MBOE's provided, depending on the

AS-BUILT

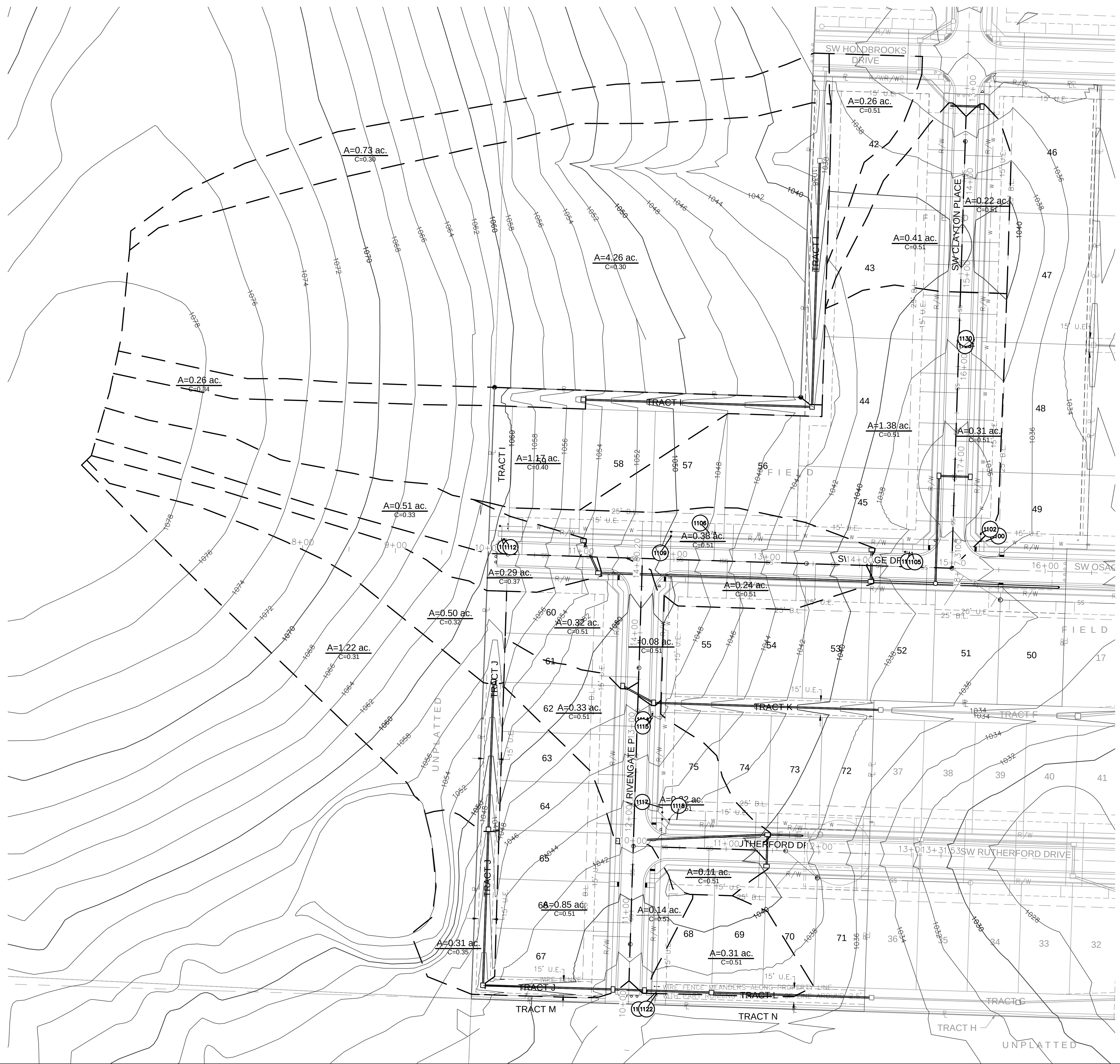


MASTER DRAINAGE PLAN STREET & STORM SEWER PLANS		REV. NO.		DATE	REVISIONS DESCRIPTION	5/26/2022		olsson Olsson, Civil Engineering Missouri Certificate of Authority #: 001592 1301 Burlingtown Street North Kansas City, MO 64116 TEL 816.361.1177 www.olsson.com
OSAGE SECOND PLAT								
drawn by: _____ checked by: _____ designed by: _____ QA/QC by: _____ project no.: _____ drawing no.: _____ date: _____		D.F. / M.O. / A.A. C.G.W. A.A. J.E.S. C19-2339 2022.05.26				2020		REVISIONS
SHEET C126								

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NOT AS-BUILT



olson



5/26/2022

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		2020
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OSAGE
SECOND PLAT

Drawn by: D.F. / M.O. / A.A.
 Checked by: C.G.W.
 Designed by: A.A.
 QC by: J.E.S.
 Project no.: C19-2339
 Drawing no.: _____
 Date: 2022.05.26

SHEET
C127

F:\2019\2001-2500\019-2339-CL40-Design\AutoCAD\Final Plans - As-Built\Sheets\GNCV\STREET & STORM\C_DRW01_C192339.dwg
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Inlet Design Table						
10 Year Return Frequency						
Inlet ID	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2	0.80	0.10	88.43%	0.10	5.13	...
C.I. 1-3	0.69	0.10	86.80%	0.09	4.57	...
C.I. 1-4	0.98	0.27	78.25%	0.11	5.30	...
C.I. 2-1(L)	...	...	...	0.11	5.50	...
C.I. 2-1(R)	...	...	...	0.14	7.10	...
C.I. 2-1	5.18	0.00	100.00%	...	...	...
C.I. 2-2(L)	...	...	...	0.05	2.34	...
C.I. 2-2(R)	...	...	...	0.09	4.71	...
C.I. 2-2	1.16	0.00	100.00%	...	...	...
C.I. 3-1	0.29	0.01	97.21%	0.07	3.52	...
C.I. 3-2	1.15	0.15	88.48%	0.13	6.52	...
C.I. 4-1	1.05	0.15	87.26%	0.12	6.05	...
C.I. 4-2	1.11	0.28	80.00%	0.12	5.82	...
C.I. 5-1	0.40	0.02	96.15%	0.08	4.04	...
F.I. 6-1	1.16	0.00	100.00%	...	...	0.08
C.I. 6-2	0.54	0.03	95.46%	0.10	4.76	...
C.I. 6-3	2.41	0.90	72.75%	0.19	9.25	...
F.I. 6-4	0.81	0.00	100.00%	...	...	0.06
F.I. 6-5	2.47	0.00	100.00%	...	...	0.13
F.I. 6-6	1.18	0.00	100.00%	...	...	0.08
F.I. 7-1	2.92	0.00	100.00%	...	...	0.15
F.I. 7-2	0.65	0.00	100.00%	...	...	0.05
C.I. 8-1	0.78	0.05	94.15%	0.11	5.75	...
C.I. 9-1	1.34	0.36	78.82%	0.13	6.51	...
Notes:						
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing Both theoretical capacity and reduced capacity are shown.						
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual						

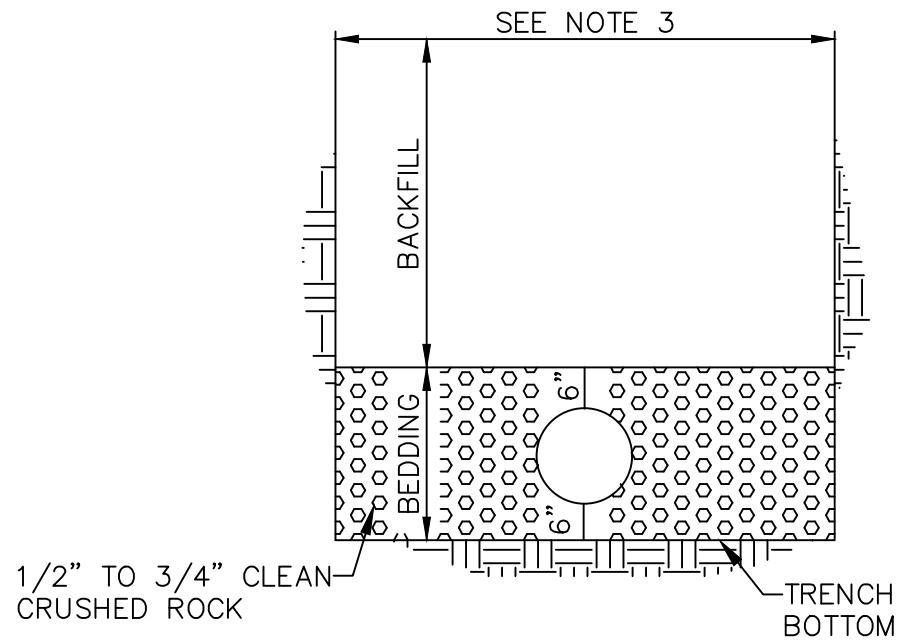
Inlet Design Table						
100 Year Return Frequency						
Inlet ID	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2	1.27	0.31	80.14%	0.13	6.34	...
C.I. 1-3	1.08	0.31	77.66%	0.11	5.64	...
C.I. 1-4	1.43	0.76	65.42%	0.13	6.55	...
C.I. 2-1(L)	...	...	...	0.16	7.76	...
C.I. 2-1(R)	...	...	...	0.18	8.77	...
C.I. 2-1	9.08	0.00	100.00%	...	...	...
C.I. 2-2(L)	...	...	...	0.06	2.89	...
C.I. 2-2(R)	...	...	...	0.12	5.81	...
C.I. 2-2	2.04	0.00	100.00%	...	...	...
C.I. 3-1	0.50	0.03	94.35%	0.09	4.34	...
C.I. 3-2	1.92	0.50	79.24%	0.16	8.22	...
C.I. 4-1	1.67	0.46	78.23%	0.15	7.49	...
C.I. 4-2	1.75	0.92	65.42%	0.15	7.44	...
C.I. 5-1	0.67	0.05	92.55%	0.10	4.99	...
F.I. 6-1	2.04	0.00	100.00%	...	...	0.11
C.I. 6-2	0.90	0.08	91.39%	0.12	5.88	...
C.I. 6-3	3.51	2.75	56.02%	0.24	11.75	...
F.I. 6-4	1.42	0.00	100.00%	...	...	0.09
F.I. 6-5	4.36	0.00	100.00%	...	...	0.19
F.I. 6-6	2.07	0.00	100.00%	...	...	0.12
F.I. 7-1	5.16	0.00	100.00%	...	...	0.21
F.I. 7-2	1.14	0.00	100.00%	...	...	0.08
C.I. 8-1	1.29	0.16	89.23%	0.14	7.10	...
C.I. 9-1	2.08	1.18	63.82%	0.17	8.31	...
Notes:						
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing Both theoretical capacity and reduced capacity are shown.						
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual						

Drainage Area Design Table						
10 Year Return Frequency						
Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2	0.24	0.51	5.00	7.35	1.00	0.90
C.I. 1-3	0.29	0.51	5.00	7.35	1.00	0.79
C.I. 1-4	0.51	0.37	5.00	7.35	1.00	1.25
C.I. 2-1(L)	0.10	0.33	5.00	7.35	1.00	0.38
C.I. 2-1(R)	0.45	0.51	5.00	7.35	1.00	1.69
C.I. 2-1(B)	0.83	0.51	5.00	7.35	1.00	3.11
C.I. 2-1	1.38	0.51	5.00	7.35	1.00	5.18
C.I. 2-2(L)	0.02	0.51	5.00	7.35	1.00	0.08
C.I. 2-2(R)	0.15	0.51	5.00	7.35	1.00	0.56
C.I. 2-2(B)	0.14	0.51	5.00	7.35	1.00	0.53
C.I. 2-2	0.31	0.51	5.00	7.35	1.00	1.16
C.I. 3-1	0.08	0.51	5.00	7.35	1.00	0.30
C.I. 3-2	0.32	0.51	5.00	7.35	1.00	1.20
C.I. 4-1	0.32	0.51	5.00	7.35	1.00	1.20
C.I. 4-2	0.33	0.51	5.00	7.35	1.00	1.24
C.I. 5-1	0.11	0.51	5.00	7.35	1.00	0.41
F.I. 6-1	0.31	0.51	5.00	7.35	1.00	1.16
C.I. 6-2	0.15	0.51	5.00	7.35	1.00	0.56
C.I. 6-3	0.86	0.51	6.49	6.92	1.00	3.03
F.I. 6-4	0.31	0.51	5.00	7.35	1.00	0.81
F.I. 6-5	1.22	0.35	8.31	6.46	1.00	2.47
F.I. 6-6	0.50	0.31	5.00	7.35	1.00	1.18
F.I. 7-1	1.17	0.32	9.16	6.26	1.00	2.92
F.I. 7-2	0.26	0.40	5.00	7.35	1.00	0.65
C.I. 8-1	0.22	0.34	5.00	7.35	1.00	0.83
C.I. 9-1	0.38	0.51	5.00	7.35	1.00	1.43

Drainage Area Design Table						
100 Year Return Frequency						
Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2	0.24	0.51	5.00	10.32	1.25	1.58
C.I. 1-3	0.29	0.51	5.00	10.32	1.25	1.39
C.I. 1-4	0.51	0.37	5.00	10.32	1.25	2.19
C.I. 2-1(L)	0.10	0.33	5.00	10.32	1.25	0.66
C.I. 2-1(R)	0.45	0.51	5.00	10.32	1.25	2.96
C.I. 2-1(B)	0.83	0.51	5.00	10.32	1.25	5.46
C.I. 2-1	1.38	0.51	5.00	10.32	1.25	9.08
C.I. 2-2(L)	0.02	0.51	5.00	10.32	1.25	0.13
C.I. 2-2(R)	0.15	0.51	5.00	10.32	1.25	0.99
C.I. 2-2(B)	0.14	0.51	5.00	10.32	1.25	0.92
C.I. 2-2	0.31	0.51	5.00	10.32	1.25	2.04
C.I. 3-1	0.08	0.51	5.00	10.32	1.25	0.53
C.I. 3-2	0.32	0.51	5.00	10.32	1.25	2.11
C.I. 4-1	0.32	0.51	5.00	10.32	1.25	2.11
C.I. 4-2	0.33	0.51	5.00	10.32	1.25	2.17
C.I. 5-1	0.11	0.51	5.00	10.32	1.25	0.72
F.I. 6-1	0.31	0.51	5.00	10.32	1.25	2.04
C.I. 6-2	0.15	0.51	5.00	10.32	1.25	0.99
C.I. 6-3	0.86	0.51	6.49	9.74	1.25	5.34
F.I. 6-4	0.31	0.51	5.00	10.32	1.25	1.42
F.I. 6-5	1.22	0.35	8.31	9.11	1.25	4.36
F.I. 6-6	0.50	0.31	5.00	10.32	1.25	2.07
F.I. 7-1	1.17	0.32	9.16	8.84	1.25	5.16
F.I. 7-2	0.26	0.40	5.00	10.32	1.25	1.14
C.I. 8-1	0.22	0.34	5.00	10.32	1.25	1.45
C.I. 9-1	0.38	0.51	5.00	10.32	1.25	2.50

Storm Sewer Design Calculation Table													
10 Year Return Frequency													
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)	Upstream Top Elev. (ft)
CONNECT TO EX. 1	EX C.I. 2	113.85	1026.43	1024.72	1.50	24	0.010	10.15	9.85	36.04	1.14	1027.57	1028.70
M.H. 1-1	CONNECT TO EX. 1	132.88	1028.42	1026.43	1.50	24	0.010	10.15	5.49	36.01	1.14	1029.56	1037.06
C.I. 1-2	M.H. 1-1	69.62	1029.96	1028.92	1.49	24	0.010	3.81	4.38	35.94	0.68	1030.64	1038.65
C.I. 1-3	C.I. 1-2	293.62	1044.65	1030.46	4.83	18	0.010	1.67	9.12	30.01	0.49	1045.14	1053.11
C.I. 1-4	C.I. 1-3	38.03	1046.10	1045.15	2.50	15	0.010	0.98	6.31	13.27	0.39	1046.49	1053.96
C.I. 2-1	M.H. 1-1	116.00	1030.33	1029.17	1.00	15	0.010	6.34	7.51	8.39	1.01	1031.35	1035.61
C.I. 2-2	C.I. 2-1	34.00	1031.17	1030.83	1.00	15	0.010	1.16	2.43	8.40	0.42	1031.59	1035.61
C.I. 9-1	C.I. 1-2	34.00	1030.80	1030.46	1.00	18	0.010	1.34	4.91	13.65	0.43	1031.23	1038.65
EX F.I. 4	EX F.I. 3	212.50	1030.50	1024.98	2.60	15	0.010	1.45	7.18	13.53	0.48	1030.98	1037.27
C.I. 3-1	EX F.I. 4	244.62	1040.79	1031.00	4.00	15	0.010	1.45	8.37	16.79	0.48	1041.27	1048.45
C.I. 3-2	C.I. 3-1	38.04	1041.85	1041.28	1.50	15	0.010	1.15	5.53	10.28	0.42	1042.27	1048.84
EX F.I. 2	EX F.I. 1	158.03	1027.56	1022.82	3.00	15	0.010	8.57	12.33	14.54	1.14	1028.70	1036.37
F.I. 6-1	EX F.I. 2	172.50	1030.04	1028.06	1.15	15	0.010	8.57	8.34	8.99	1.14	1031.18	1038.17
C.I. 6-2	F.I. 6-1	72.11	1031.26	1030.54	1.00	15	0.010	7.41	7.71	8.39	1.08	1032.34	1037.50
C.I. 6-3	C.I. 6-2	34.00	1032.10	1031.76	1.00	15	0.010	6.87	7.63	8.39	1.05	1033.15	1037.50
F.I. 6-4	C.I. 6-3	140.01	1034.00	1032.60	1.00	15	0.010	4.46	6.94	8.39	0.86	1034.86	1042.09
F.I. 6-5	F.I. 6-4	168.17	1038.70	1034.50	2.50	15	0.010	3.65	9.22	13.27	0.77	1039.47	1047.22
F.I. 6-6	F.I. 6-5	158.97	1045.56	1039.20	4.00	15	0.010	1.18	6.02	16.79	0.43	1045.99	1054.84
EX F.I. 5	EX C.I. 5	98.76	1031.25	1030.26	1.00	18	0.010	3.57	6.50	13.67	0.72	1031.97	1037.71
F.I. 7-1	EX F.I. 5	265.34	1037.06	1031.75	2.00	15	0.010	3.57	8.46	11.88	0.76	1037.82	1045.01
F.I. 7-2	F.I. 7-1	246.48	1045.57	1037.56	3.25	15	0.010	0.65	3.48	15.13	0.31	1045.89	1054.58
CONNECT TO EX. 2	EX C.I. 1	127.46	1030.64	1024.27	5.00	15	0.010	2.69	10.84	18.77	0.66	1031.30	1032.33
C.I. 4-1	CONNECT TO EX. 2	37.54	1032.52	1030.64	5.01	15	0.010	2.69	4.11	18.79	0.66	1033.18	1039.86
C.I. 4-2	C.I. 4-1	161.56	1034.64	1033.02	1.00	15	0.010	1.24	4.90	8.41	0.44	1035.08	1042.63
C.I. 5-1	C.I. 4-1	34.00	1033.36	1033.02	1.00	15	0.010	4.00	3.51	8.39	0.25	1033.61	1039.86
EX C.I. 4	EX C.I. 3	49.50	1029.25	1028.76	0.99	15	0.010	0.78	4.26	8.35	0.35	1029.60	1035.32
C.I. 8-1	EX C.I. 4	34.00	1030.09	1029.75	1.00	15	0.010	0.78	4.27	8.39	0.35	1030.44	1035.33

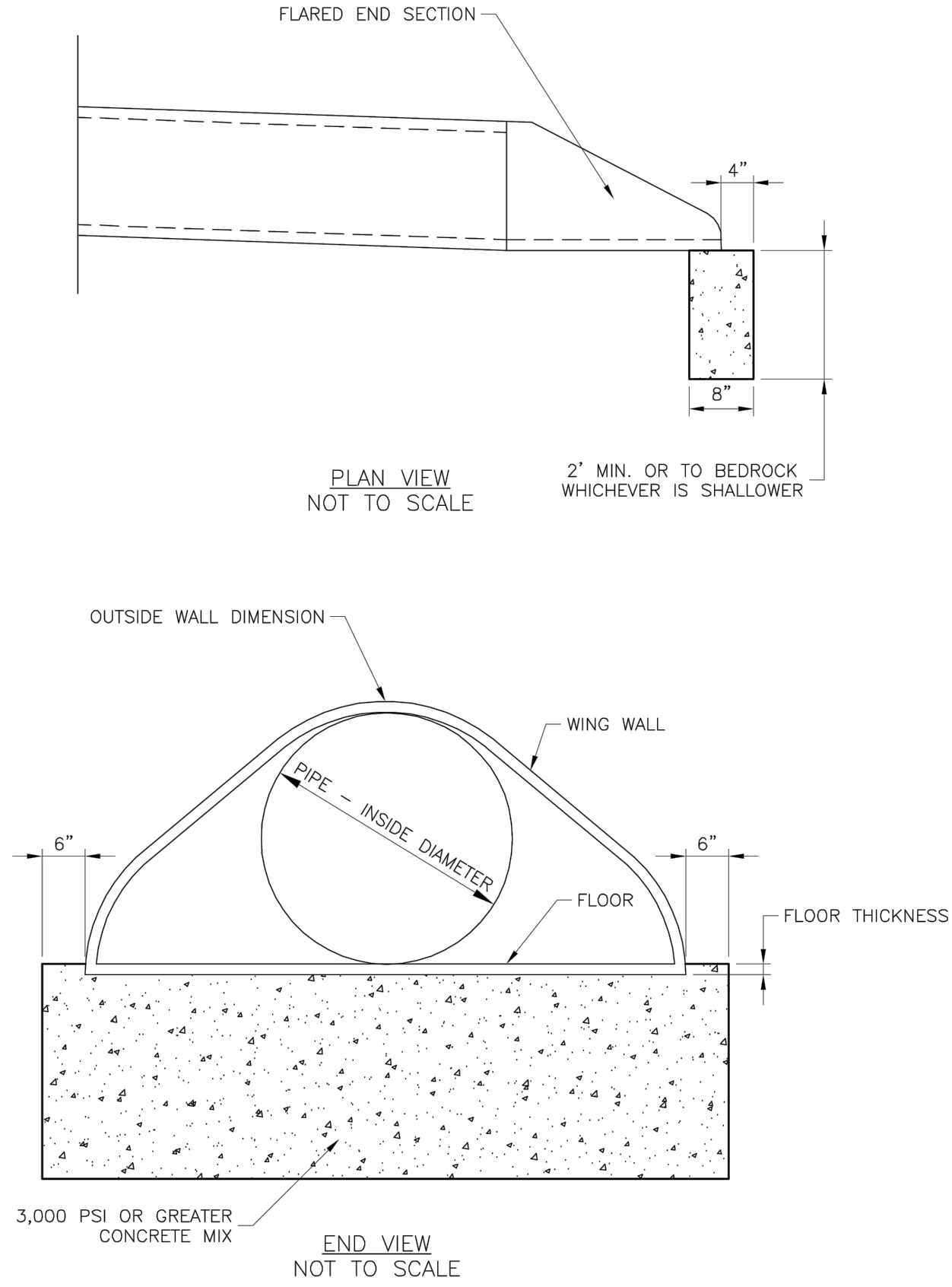
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DATE: May 26, 2022 7:38am
USER: ssaylor
XREFS: C_PTBLC_C192339



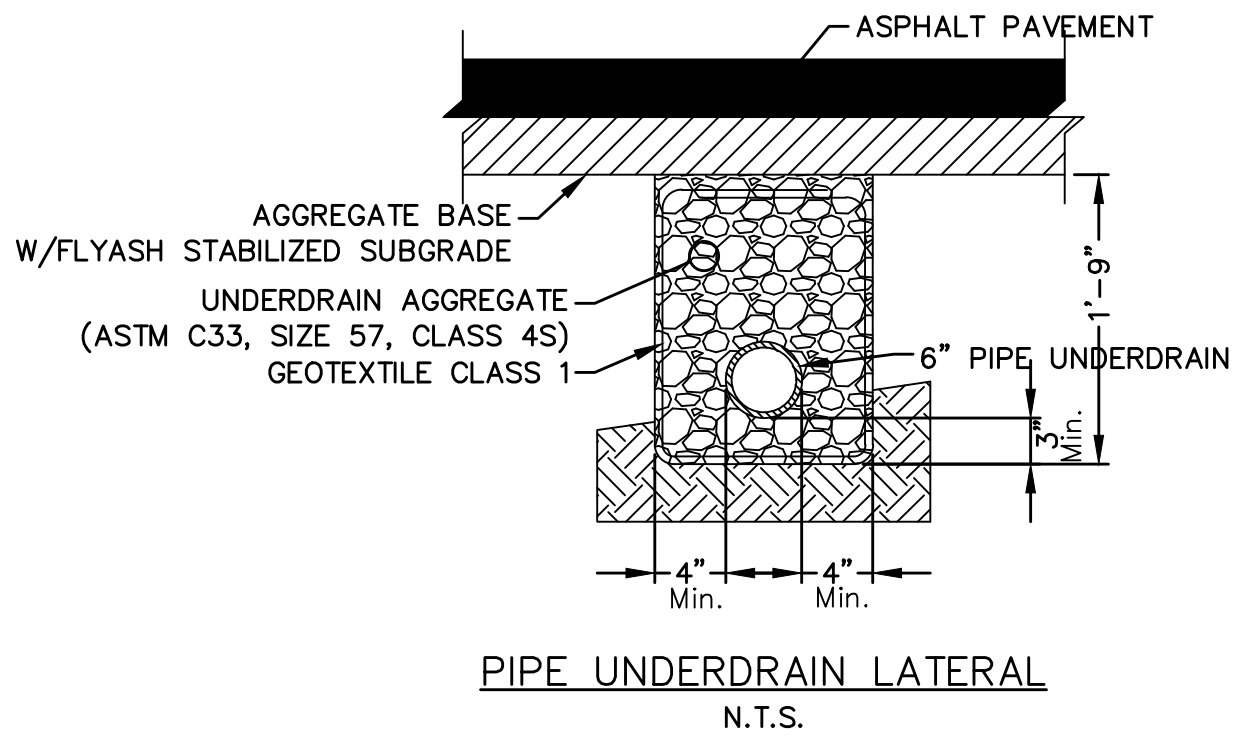
TYPICAL SECTION FOR PLASTIC PIPE
(IN ROCK OR SOIL)

UNDERGROUND PIPE INSTALLATION FOR STORM SEWER LINES
N.T.S.

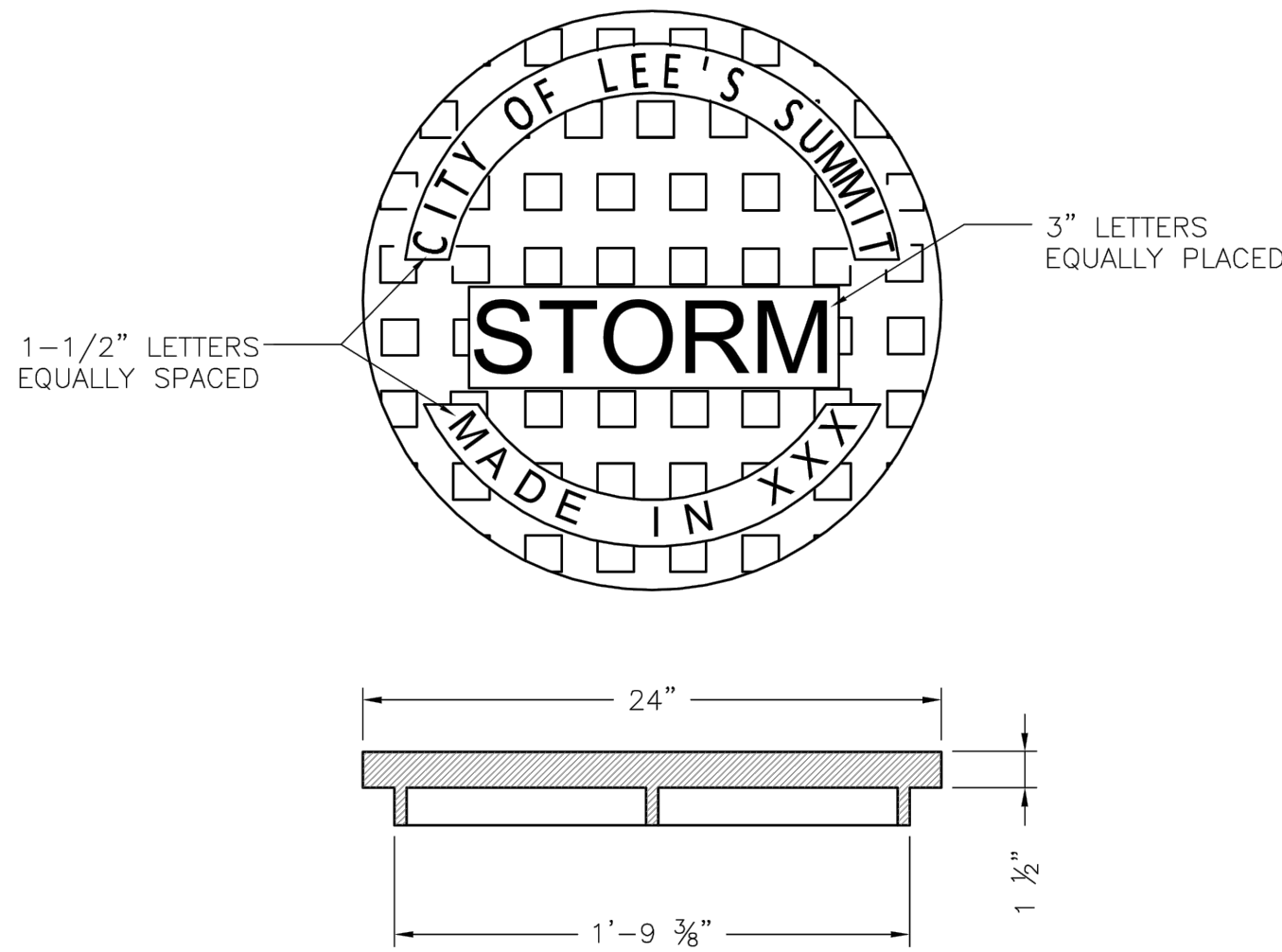
- BACKFILL SHALL BE JOB EXCAVATED MATERIAL FREE FROM DEBRIS AND STONES COMPACTED TO 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. BACKFILL UNDER PAVEMENT (EXISTING OR PROPOSED), SHALL BE FLOWABLE FILL.
- TRENCH BANKS MAY BE CUT BACK ON SLOPES IN ACCORDANCE WITH CURRENT OSHA REGULATIONS, BUT ONLY IN AREAS WHERE THE INCREASED TRENCH WIDTH WILL NOT INTERFERE WITH SURFACE FEATURES. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.
- MINIMUM AND MAXIMUM WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.



LS	LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	Date: 04/17 Drawn By: MIF Checked By: DL
	FLARED END SECTION SUPPORT DETAIL	STM-5

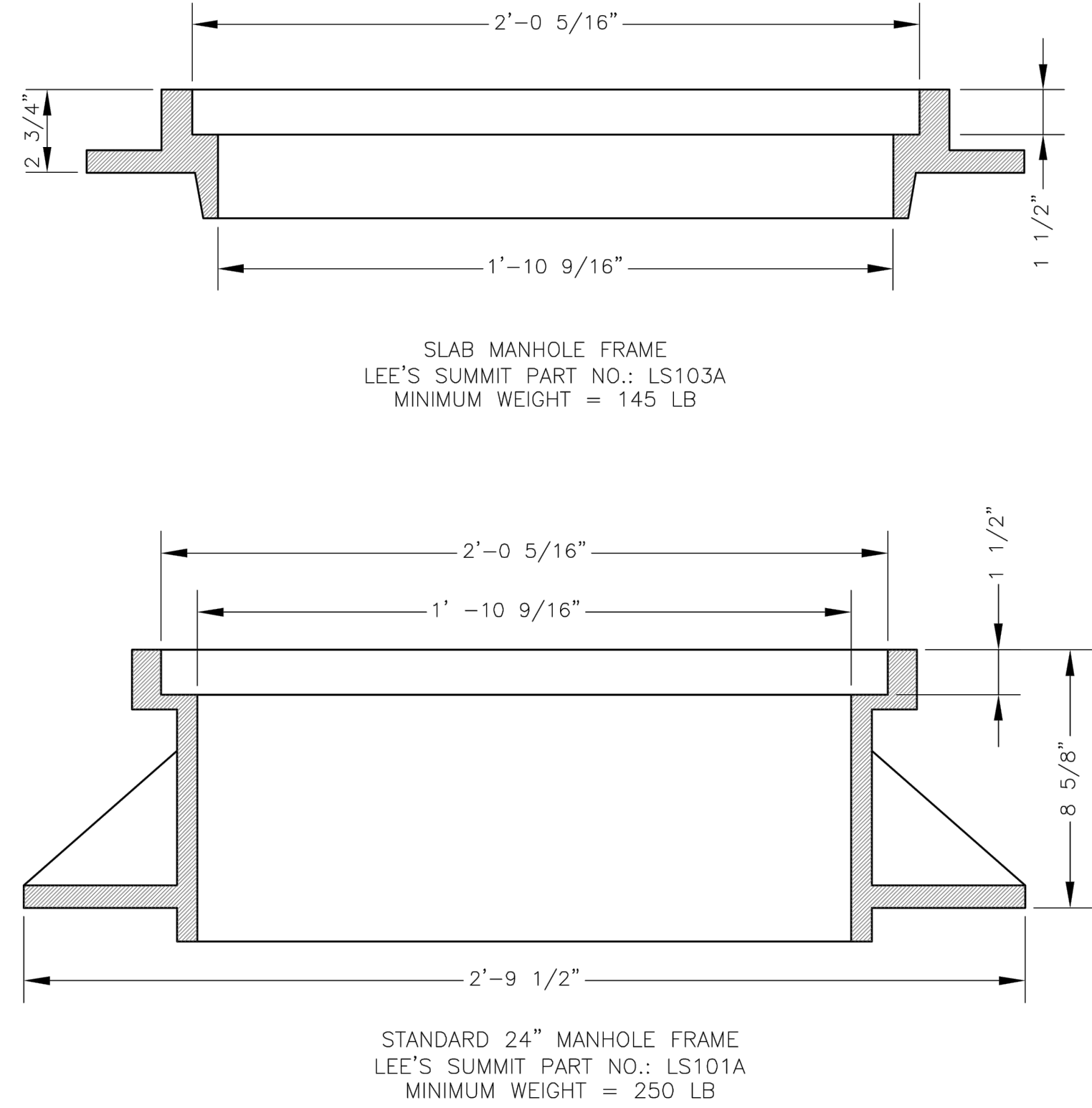


- NOTES:
- Where Pipe Underdrains are used, all Underdrain Outlet Pipes shall be solid wall with watertight joints. All Outlets Pipes shall be tied into the nearest storm sewer inlets at roadway sag locations as indicated in the street profile.
 - All Underdrain Pipes shall be installed at a minimum slope of 1%.
 - Underdrain Pipe shall be installed with the perforations placed down.
 - Blanket Underdrain Aggregate, Pipe Underdrain Aggregate, Pipe Underdrain, Edge Underdrain and Outlet Pipe shall conform to City of Lee's Summit Specifications.
 - Overlap geotextile at top of trench a minimum of 12\"/>



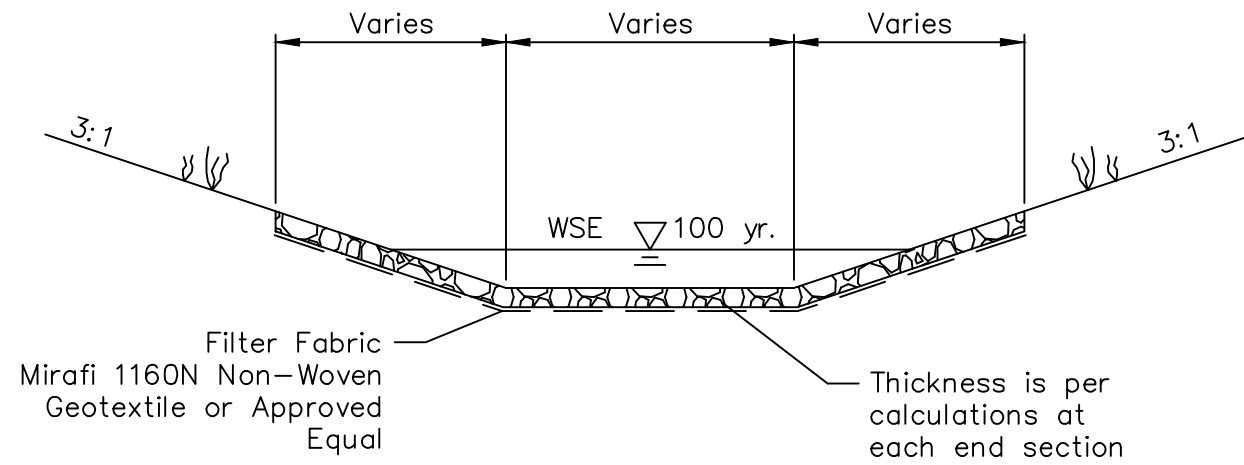
STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

LS	LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	Date: 04/17 Drawn By: MIF Checked By: DL
	STORM MANHOLE COVER DETAIL	STM-6



*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

LS	LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	Date: 04/17 Drawn By: MIF Checked By: DL
	STORM MANHOLE FRAME DETAIL	STM-7

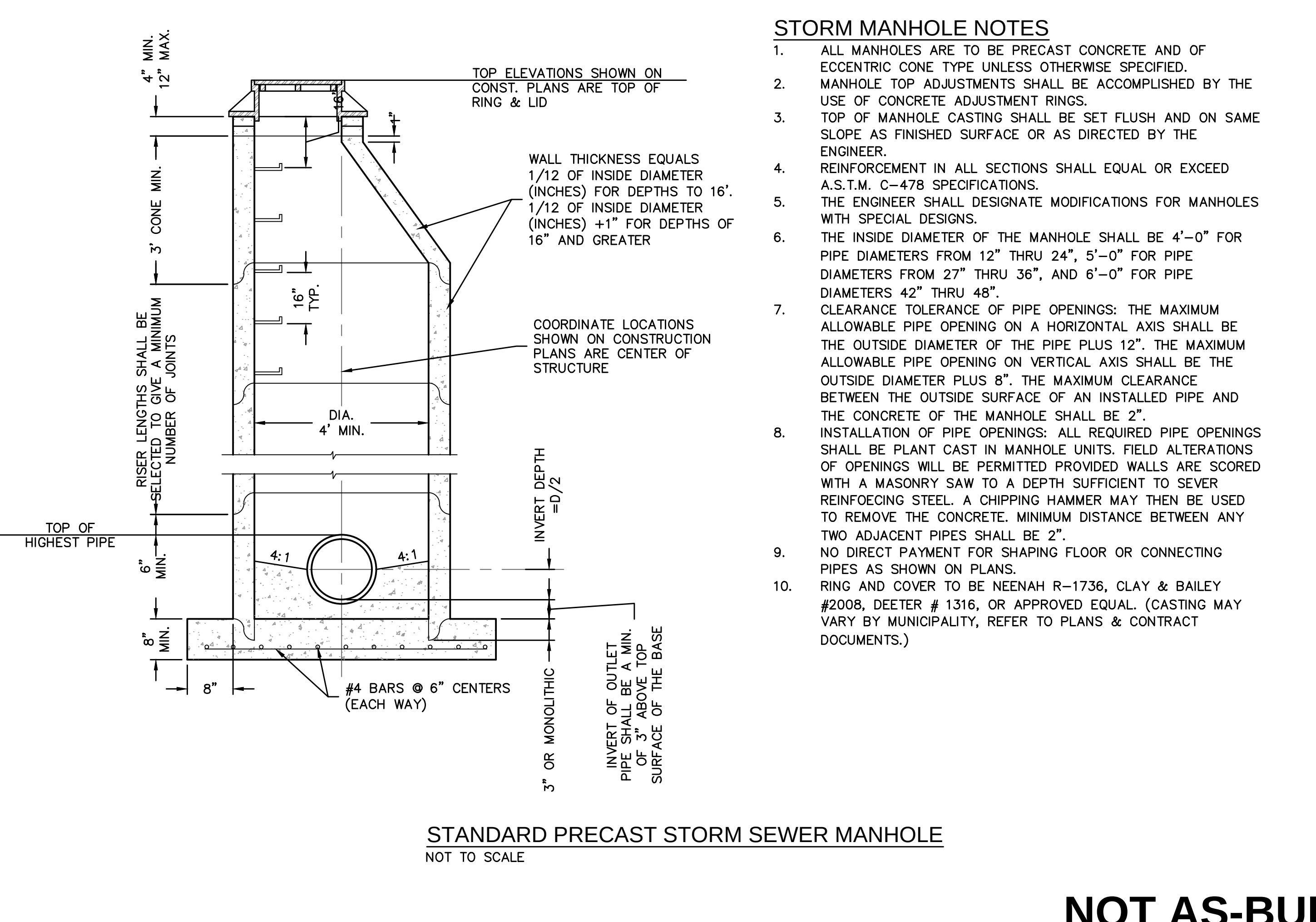
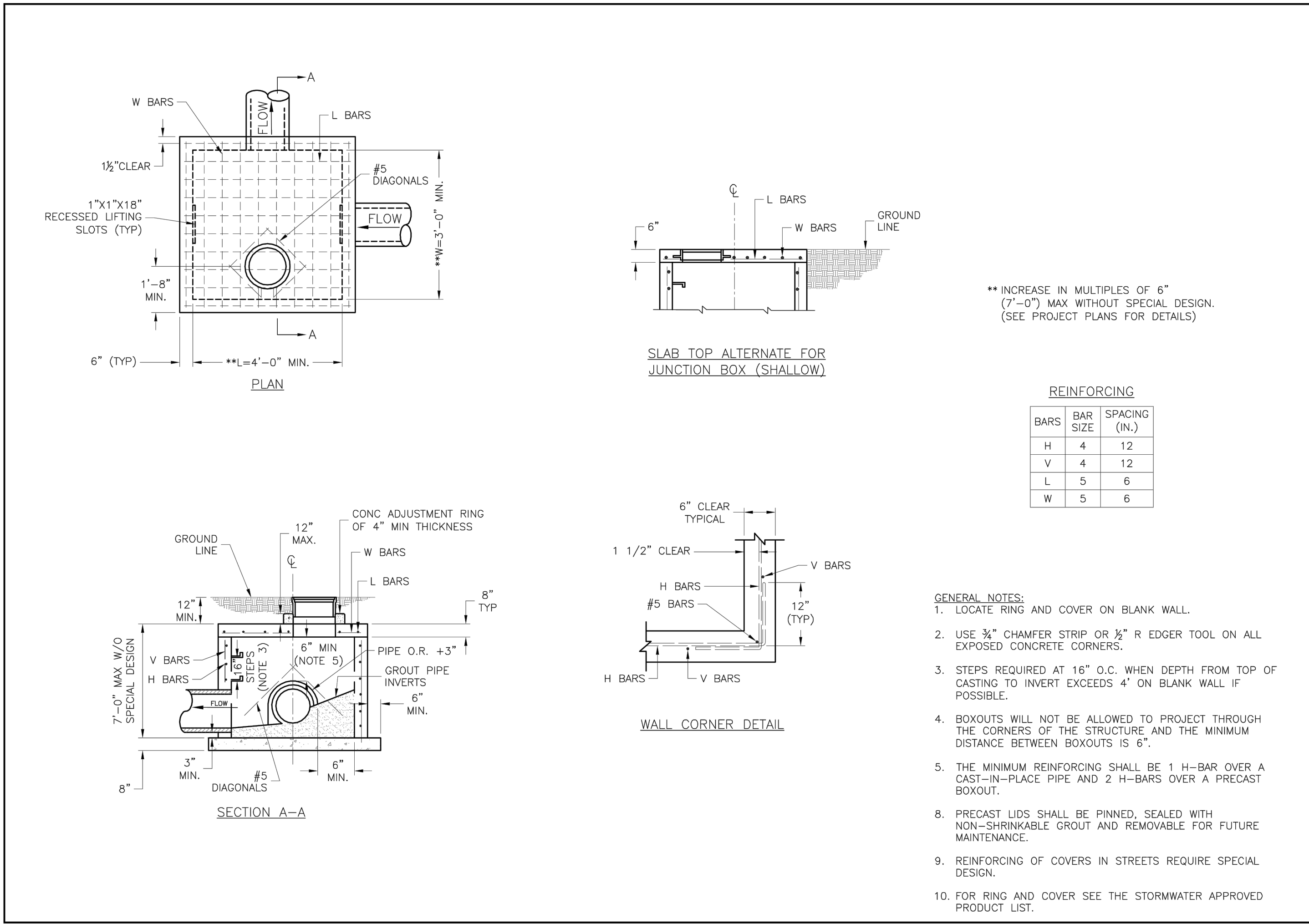
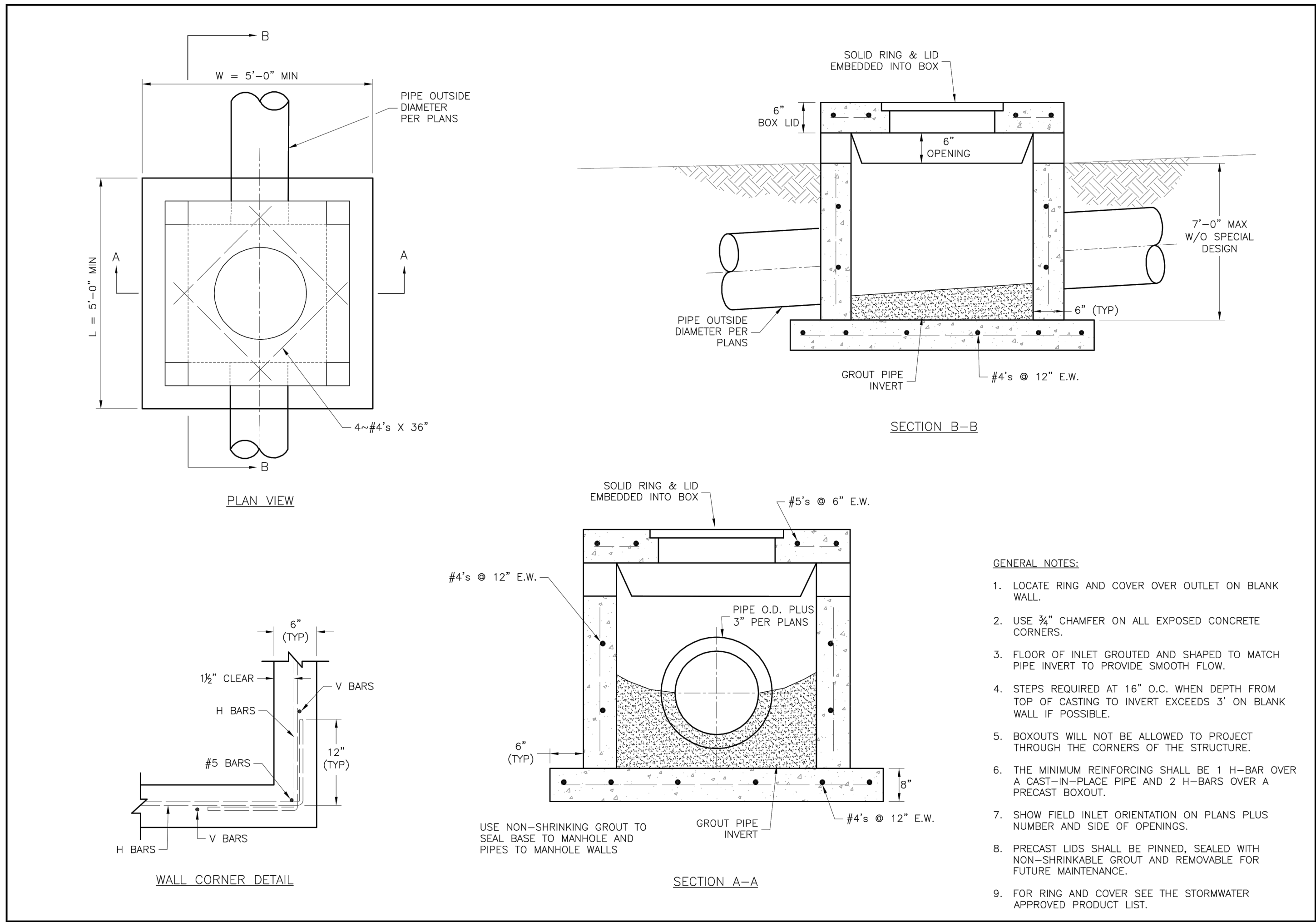
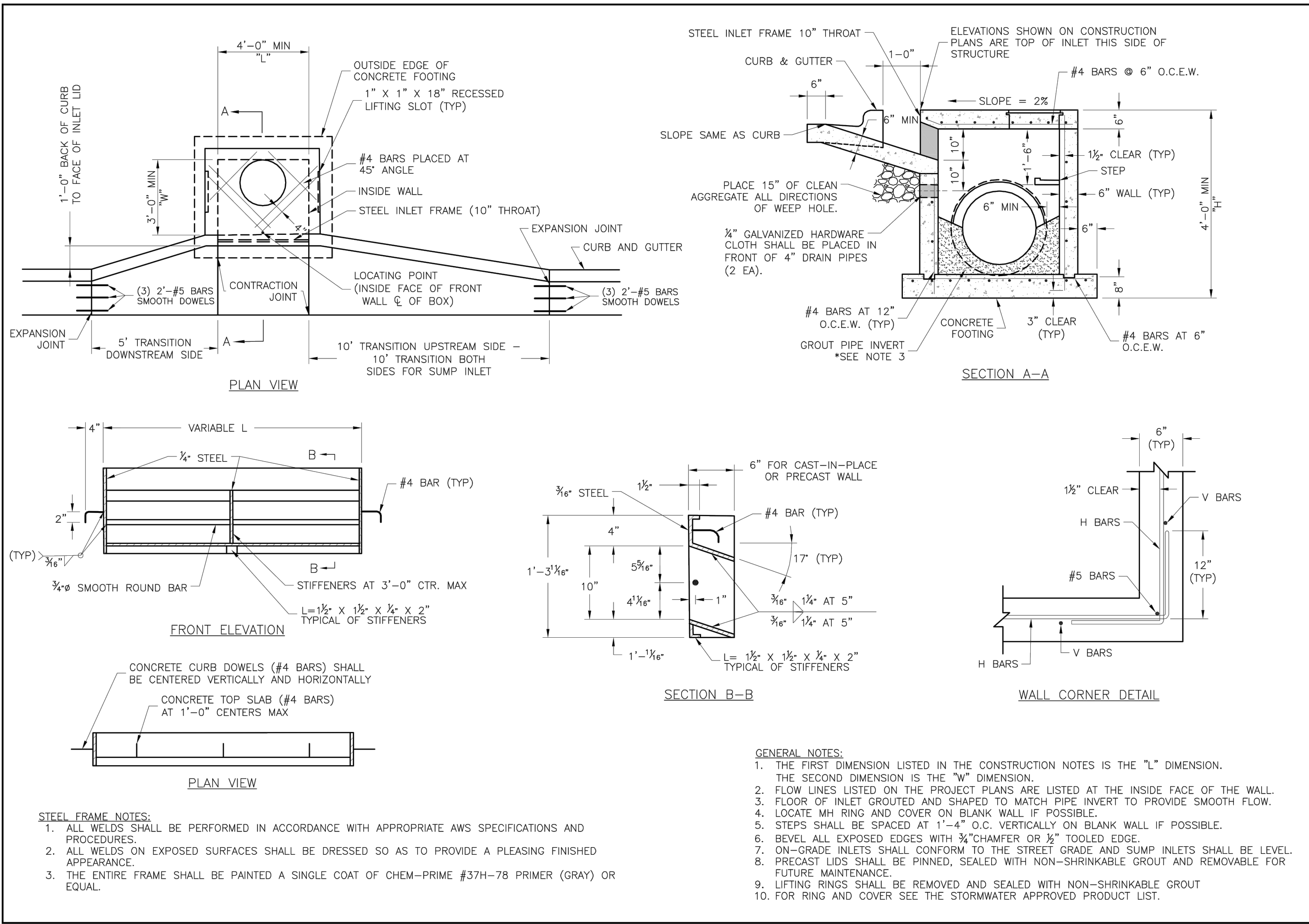


NOTE: DIMENSIONS ARE PER CALCULATIONS AT EACH END SECTION

RIPRAP DETAIL
N.T.S.

NOT AS-BUILT

olsson Olsson - Civil Engineering Missouri Certificate of Authority #: 001592 1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 www.olson.com		STATE OF MISSOURI JULIE ELAINE SELLERS Professional Engineer NUMBER PE-2017000367 5/26/2022	
REVISIONS DESCRIPTION		REV. NO.	
DATE			
DETAILS STREET & STORM SEWER PLANS		2020	
OSAGE SECOND PLAT			
drawn by: D.F./M.O./A.A. checked by: C.G.W. designed by: A.A. QA/QC by: J.E.S. project no.: C19-2339 drawing no.: date: 2022.05.26			
SHEET C129			



STANDARD PRECAST STORM SEWER MANHOLE
NOT TO SCALE

NOT AS-BUILT

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #: 001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
5/26/2022

REVISIONS DESCRIPTION

DATE

REV. NO.

2020

DETAILS (CONT'D)
STREET & STORM SEWER PLANS

OSAGE
SECOND PLAT

drawn by: D.F./M.O./A.A.
checked by: C.G.W.
designed by: A.A.
QA/QC by: J.E.S.
project no.: C19-2339
drawing no.:
date: 2022.05.26

SHEET
C130

